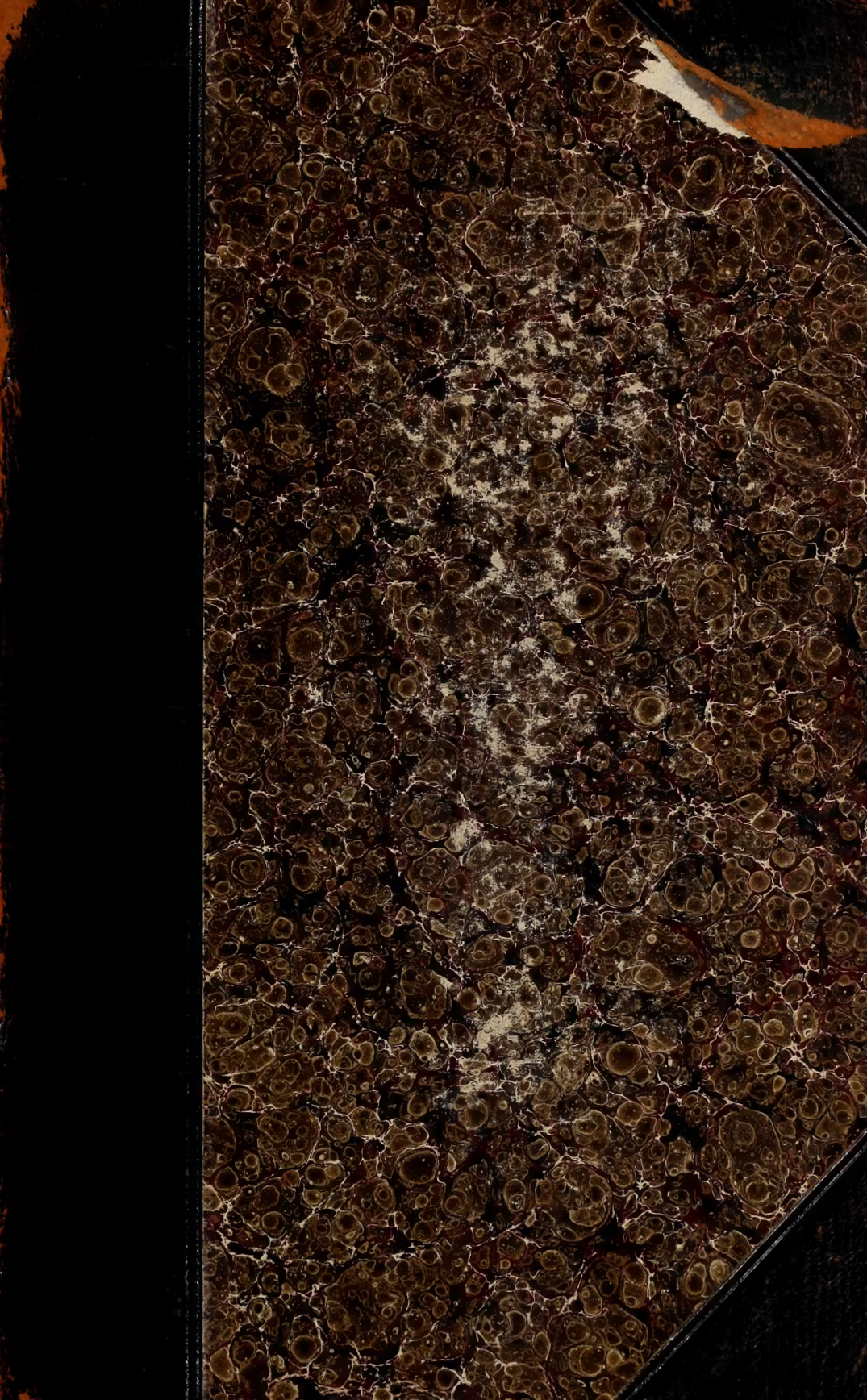




75927



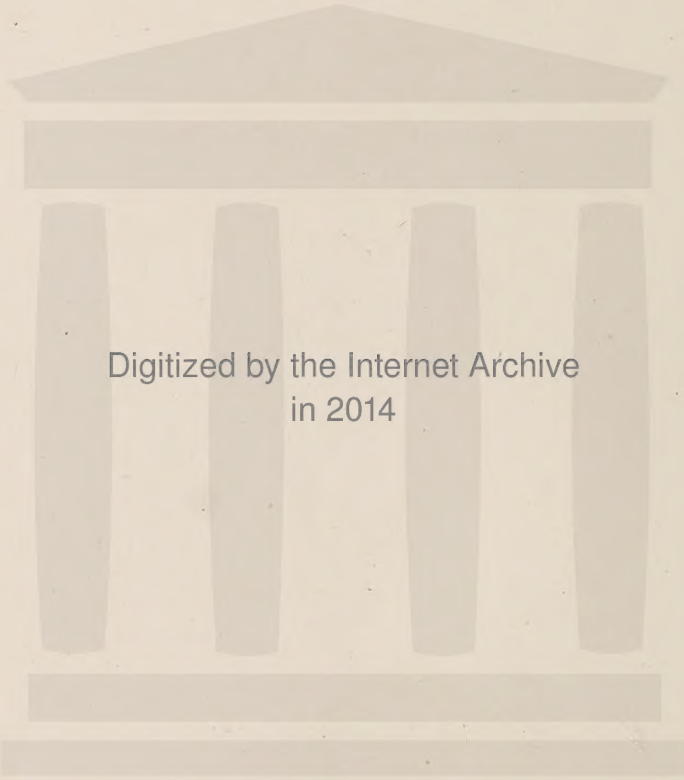
Class _____ No _____

Presented by _____

William W. Keen Fund.

672





Digitized by the Internet Archive
in 2014

BUFFALO MEDICAL JOURNAL

Established 1845 by AUSTIN FLINT M. D.

EDITOR:

WILLIAM WARREN POTTER, M. D.

ASSISTANT EDITORS:

WILLIAM C. KRAUSS, M. D.

NELSON W. WILSON, M. D.

ASSOCIATE EDITORS:

JAMES WRIGHT PUTNAM, M. D. ERNEST WENDE, M. D.
JOHN PARMENTER, M. D. JOHN A. MILLER, Ph. D.
MAUD J. FRYE, M. D.

VOL. LXIV.

August 1908 to July 1909



BUFFALO.

1909.

Contributors to Vol. LXIV.

AUGUST, 1908—JULY, 1909.

BAUM, HENRY CLAY.....	Syracuse
BROWN, WILLIAM MORTIMER.....	Rochester
BURKE, JOSEPH	Buffalo
COLEGROVE. JAMES B.....	Washington
COTTIS, G. W.....	Batavia
CONKLIN, W. L.....	Dansville
GOULD, GEORGE M.....	Ithaca
CUMSTON, CHARLES GREENE	Boston
DARLINGTON, THOMAS	New York
DAVIE, NEILSON	Glasgow
DOWD, J. HENRY.....	Buffalo
FREDERICK. CARLTON C.....	Buffalo
HAYD, HERMAN E.	Buffalo
HOPKINS. HENRY REED.....	Buffalo
HOWE, WILLIAM A.....	Phelps, N. Y.
JONES. ALLEN A.....	Buffalo
JONES, WILLIAM B.	Rochester
KING, JAMES E.....	Buffalo
KRESHOVER, J S.	New York
LEVY. I. HARRIS	Syracuse
LEWIS, BRANSFORD	Saint Louis
LOUGHHEAD, W. H.....	Andover. N. Y.
LOVELAND, B. C.....	Syracuse
MACLEOD, JAMES A.....	Buffalo
MANN. EDWARD C.	Buffalo
MCGUIRE, EDGAR R.....	Buffalo
MORRIS. ROBERT T.....	New York

FEB 26 1910
75927

LIST OF CONTRIBUTORS.

MORRISON. A. CRESSY	Chicago
MUNSON. EDWARD	Medina
PARK, ROSWELL	Buffalo
PARSCHE. THOMAS W.....	Chicago
PEDERSEN, JAMES	New York
PRYOR. JOHN H.....	Buffalo
PUTNAM. JAMES WRIGHT	Buffalo
REED. CHARLES A. L.	Cincinnati
ROOTH, H. C.....	Buffalo
SENFTENBERG. B. F.....	New York
SLINGERLAND, I. M.....	Fayetteville
SNIVELY, I. NEWTON	Philadelphia
STOCKER, G. B.....	Buffalo
THIBAudeau, A. A.....	Buffalo
TOMS. S. W. S.....	Nyack
TREVES, SIR FREDERICK.....	London
ULLMAN, JULIUS	Buffalo
WEISS, EDWARD A.....	Pittsburg
WENDE, GROVER W.....	Buffalo
WILCOX, DEWITT G.....	Buffalo
WILSON, NELSON W.....	Buffalo
WILSON, R. J.....	New York

BUFFALO ACADEMY OF MEDICINE

MEDICAL ASSOCIATION OF CENTRAL NEW YORK

MEDICAL SOCIETY OF THE COUNTY OF ERIE

BUFFALO MEDICAL JOURNAL.

VOL. LXIV.

AUGUST, 1908.

No. 1

ORIGINAL COMMUNICATIONS.

Originality and Priority in Modern Cystoscopes.

A REPLY TO DR. F. TILDEN BROWN.

By BRANSFORD LEWIS, M. D., SAINT LOUIS.

IN the *Medical Record* of February 29, 1908, and in the *New York Medical Journal* of April 11, 1908, Dr. F. Tilden Brown, of New York, is quoted as presenting a paper on Ureteral Catheterisation, before the meeting of the Medical Association of the Greater City of New York, held January 20, 1908. In this paper the essayist makes certain well-defined claims to originality and priority with respect to his instruments, and also claims that his originality has been trespassed upon. The allegations are so worded as to leave no doubt that I am the one accused, and also leave no doubt as to the necessity of a reply, which is herewith presented.

In order that Dr. Brown's position may be correctly stated, his own words shall be used, as found in the publications mentioned, as well as in expressions of his in other contributions. Quotations from the two journals (practically the same in both) follow:

"Dr. Brown's remarks were directed more particularly to instruments and methods with which he himself had to do, and were supplemented by wall drawings and photographs to demonstrate the various developmental forms, since 1900, of his original 'composite cystoscope,' the identical instrument which a St. Louis cystoscopist had recently appropriated, and had been presenting as his own 'universal cystoscope.' This composite cystoscope, made by the Wappler Co., of New York, was a vastly more useful instrument than its immediate predecessor, the author's double-catheter direct vision cystoscope, which Leiter, of Vienna, made for him in 1898, and which was the first telescopic cystoscope, of any form, to provide for two catheters and effect synchronous catheterism of the ureters. But this Vienna instrument had no reserve channels for irrigation. It was with the end in view of finding a way to add such irrigation channels to the already practicable double-catheter direct vision cystoscope, while, at the same time, not increasing the circumference of the shaft beyond

24 French, that the Brown-Wappler efforts were first directed, in 1900. With what initial success these efforts had met and what constantly added improvements he expected, the present presentation was intended to fully demonstrate. It should be here added that the speaker's first double-catheter instrument was but a modification of the then existing Brenner single cystoscope; whereas his subsequent instruments involved a wholly novel departure from all the preëxisting types. The first essential change lay in getting rid of the old-time terminal window at the vesical end of the sheath, which was followed by the use of different kinds of interchangeable telescopic tubes for the same common sheath. Up to the present time its development on this basis had resulted in giving us at least three complete cystoscopes for different purposes, adjustable in one sheath. Still another tube, of paramount value, to go with this common sheath, was all but completed, in the shape of an indirect vision, double-catheter telescope which would be welcome to those who preferred this method of ureter catheterism to the direct one, and which here in

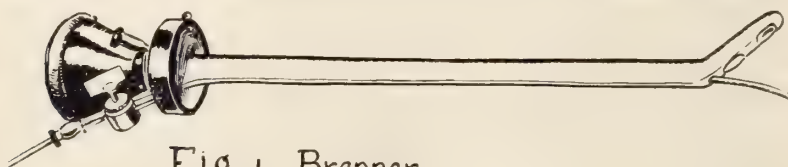


Fig. 1. Brenner

America had been gaining constantly in favor since the first introduction of the composite cystoscope."

In another contribution¹ Dr. Brown expresses his claim to priority regarding the double catheter tubes in the following terms:

"The speaker may be pardoned if, influenced by an experience of this kind and from a source so little expected, he asks now to place on record the fact that his was the first cystoscope devised for and successfully used to catheterise both ureters at the same time."

From these several quotations from Dr. Brown I believe we can fairly assume that his claims and complaints are embodied in the following three propositions:

1. That in modifying Brenner's (Fig. 1) single catheterising cystoscope in 1899², by supplying it with two catheterising channels instead of the one it already possessed, he promulgated, as he says, his "double catheterising, direct vision cystoscope,

1. Med. and Surg. Reports of Bellevue Hospital, Vol. I., January, 1905, p. 368.

2. So dated by Dr. Brown in his first publication of the instrument in the *Annals of Surgery*, 1899, p. 661, although he would now lead us to infer that it was 1898 (see first quotation). The composite is attributed to 1901 (instead of 1900) by the Wappler Electric Controller Co., in the following extract from a letter to Dr. Brown: "On April 30, 1901, we made for you [Brown] your first composite cystoscope.—Wapp. E. C. Co."

which was the first telescopic cystoscope, of any form, to provide for two catheters and effect synchronous catheterisation of the ureters."

2. That his composite cystoscope of 1901" involved a wholly novel departure from all the preëxisting types."

3. That in planning my universal cystoscope, presented in 1906, I copied his composite instrument.

Before answering these propositions directly, I must advert to some facts of cystoscopic history. Modern cystoscopes are divisible into two groups or classes: (a) those of fixed-lens systems, in which the lenses are inseparably connected with the shaft of the instrument, the whole being permanently assembled into one piece; (b) those in which the cystoscope is separable into

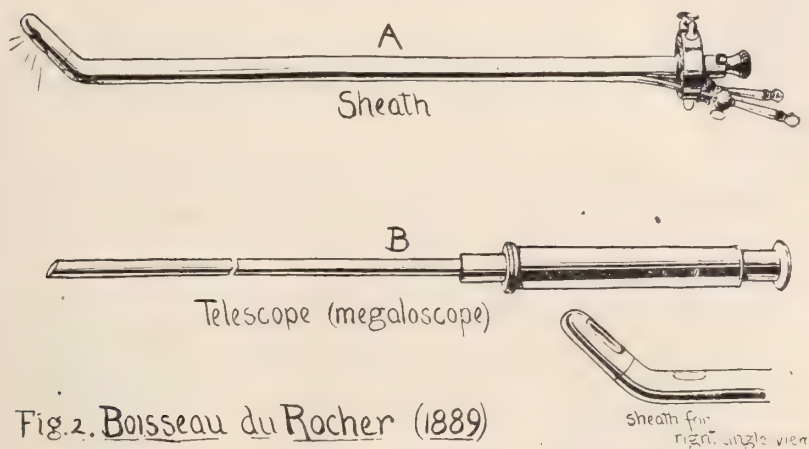


Fig. 2. Boisseau du Rocher (1889)

two principal parts—namely, a sheath, and a telescope or ocular part.

With one exception, to be mentioned later, all of the cystoscopes submitted by the father of modern cystoscopy, Nitze, were of the first group; the departure from this plan, as exhibited in the sheath-and-telescope group, was devised and developed by Boisseau du Rocher, of France, and the full credit for originating it is due to him. His first instrument, devised and used by operators of Paris as early as 1889, was published in the *Annales des maladies des organes genito-urinaires*, 1890, pp. 65-93. It embodied the following remarkable features, as shown by the description and illustrations (Fig 2) of the author, as well as by numerous writings of others of the succeeding fifteen years—namely, a sheath, bearing a removable electric incandescent lamp in the chamber of its beak, illuminating the field on the convexity of the instrument; in its lower wall two small channels for the definite purpose of conducting two ureteral catheters, and for

effecting change of the fluid in the bladder, or irrigation. The sheath was supplied with an obturator, which facilitated the introduction of the cystoscope into the bladder, after which the obturator was replaced by the telescope or ocular apparatus, that gave the direct view within the bladder.

Describing different features of this sheath, (*ibid.* p. 73) and proving the definite purpose of double synchronous catheterisation fulfilled by the tubes, the author says: "On the lower side of the straight sheath run two parallel tubes with internal caliber of No. 6, French scale. These tubes open immediately behind the window, *o*. At the other (ocular) extremity they terminate at the cocks *r r*; and contain obturators *m m* to facili-

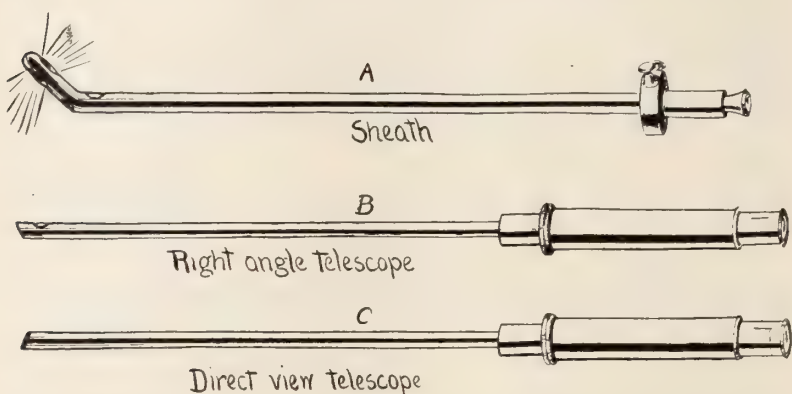


Fig. 3.

Boisseau du Rocher - (1898)

tate the passage of the instrument over the urethral mucous membrane. These small tubes have two different purposes: they serve, in the first place, as conductors for the ureteral catheters. Nothing is simpler, having observed the orifice of the ureters, with the catheter in situ, than to guide the latter and engage it in the ureter. By pushing it from the outside, one may insert it to the depth desired. Finally, these small catheters being controlled and independent, every facility is furnished for catheterising the two ureters without the necessity of withdrawing the instrument or disengaging the first catheter.

"A second purpose, also very important, fulfilled by the two little tubes, is that of irrigation of the bladder. They constitute, in reality, a double-current catheter, by means of which one may effect irrigation, if not complete and rapid, at least sufficient to maintain the transparency of the liquid."

This model of Boisseau's instrument furnished the field of

view and of manipulation on the convex side. In order to obtain a view on the concavity (the right-angle view) a second sheath was constructed with the lamp exposed by a fenestrum on the concavity (Fig. 2) with another fenestrum at o, opposite to which the prism of the telescope came when it was introduced into the sheath. So that these two instruments of 1889 furnished, together, all of the objects furnished by Brown's first cystoscope of ten years later—namely, by the sheath-and-telescope plan: (1) direct view for inspection; (2) indirect view for inspection; (3) irrigation of the bladder, either through the two catheter tubes during manipulation, or through the sheath when obturator and telescopes were not in place; and finally, (4) double-bar-

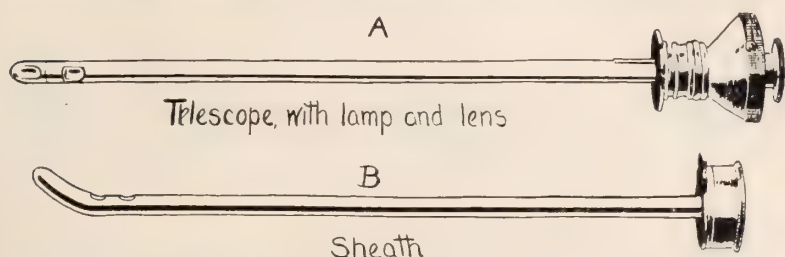
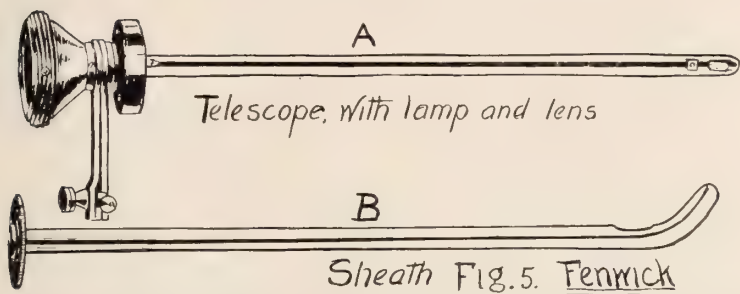


Fig 4 Güterbock - 1895



relled catheter channels for synchronous catheterisation of both ureters at one sitting.

The faithfulness with which Dr. Brown followed the pioneer example here set is an eloquent testimonial of his appreciation of the work of Boisseau,—more eloquent, it must be said, than any written acknowledgment on the subject that I have been able to discover. On the contrary, in his writings we find him claiming, as late as February of this year, the full and complete credit of having introduced "the first telescopic cystoscope, of any form, to provide for two catheters and effect synchronous catheterisation of the ureters." The catheter-tubes of Boisseau were carried within the wall of the sheath; those of Brown in the wall

of the telescope. This involved a difference in the location, merely, of the same features.

That this instrument of Boisseau received wide recognition, and that the definite purposes above mentioned were realised by the profession, is indicated in almost every contribution which discusses cystoscopy in a broad way, written in the next following fifteen years. In speaking of his experience in catheterising ureters with Boisseau's instrument (*Annales des Maladies des organes genito-urinaires*, 1889, p. 626), Poirier mentions that the difficulties that the cystoscope meets with in the case of tumors of the bladder do not exist in applying it to catheterisation of the ureters; that this operation is very easy. After only a small experience, the operator easily found the orifice of the ureters and

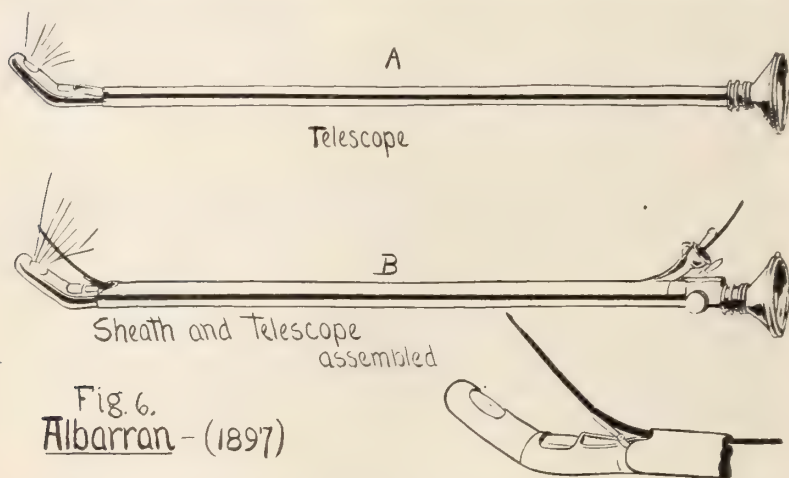


Fig. 6.
Albarran - (1897)

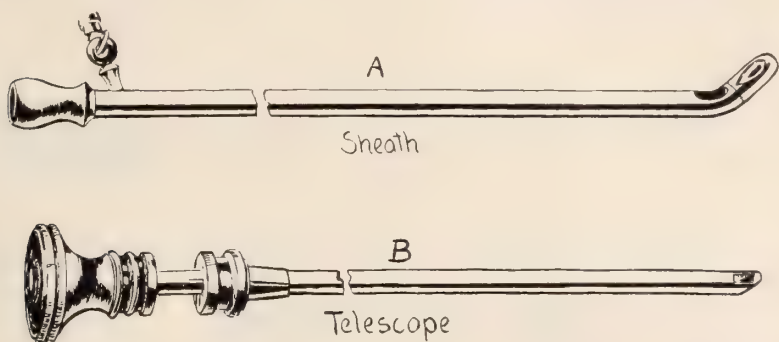
with the small catheter conducted by the particular canal included in the cystoscope, easily penetrated the ureter. He mentions two instances in which both he and his assistant had successfully conducted the manipulations on living individuals in the previous month. His final conclusion was that surgery was henceforth in possession of an easy and practical means of obtaining the separation of the secretions from the two kidneys.

Burckhardt, in *Zuelzer's Handbuch der Harn und Sexualorgane*, Vol. III., p. 158, describes Boisseau's instrument at length, and speaks of the small channels serving for the purpose of introducing the ureter catheters into the ureters.

In 1898 *Annales des maladies des organes genitourinaires*, p. 485), Boisseau submitted an additional model of his sheath-and-telescope plan, in which, by double fenestration of the beak, and multiple ocular telescopes, views were afforded on both concavity and convexity of the same instrument (Fig. 3). One

year after this presentation of Boisseau's third model, the first one of Brown appeared,—a double-barrelled modification of Brenner's, as he terms it (*Annals of Surgery*, 1899), and in the illustration of the paper, then presented, designates it with the date, 1899, (Fig. 10).

Thus we have in Boisseau's instruments of 1889 and 1898 all of the essential features of Brown's of 1899 and 1901; but especially do we find in them the definite and complete negation of his claim, repeatedly made, that his "double-catheter direct vision cystoscope was the first telescopic cystoscope, of any form, to provide for two catheters and effect synchronous catheterisation of the ureters."



Nitze-
Fig. 7. Evacuation cystoscope. (1897)

Dr. Brown's claim to this effect is all the more surprising when we observe the evidence of his acquaintance with this feature of Boisseau's instrument, in the allusion he makes to it in his contribution of 1899 to the *Annals of Surgery*. In speaking of the efforts that had been made to provide the Nitze-Leiter cystoscope with a separate channel for the conveyance of a ureteral catheter, with the belief that such a contrivance could be as successfully used in men as in women, Dr. Brown says: "The first instrument of this class was that of Dr. Brenner (1887), and Boisseau du Rocher's shortly after."

But even more significant and surprising than this is the remark of Dr. Brown, following immediately afterward, in the same paper, that "They (Brenner and Boisseau) utilised the Nitze-Leiter cystoscope which had its window opposite the eye-

piece, and a catheter outlet just below the window." "A catheter outlet," forsooth! That is a scant concession to make to Boisseau's instrument, under the circumstances. It looks questionable, to say the least, in connection with the presentation of the so-called "first telescopic cystoscope of any form to provide for two catheters and effect synchronous catheterisation of the ureters." The only alternative would have been to come out frankly and refer to the two catheter outlets of that instrument.

In this connection, I have a confession of my own to make; that previous to my late researches into this subject, in common with many others, I have been accepting Dr. Brown's dictum about this double-barrelled catheter feature, and have been in the habit of ascribing to him the credit of originating it, as applied to Brenner's instrument. But I can conscientiously do that

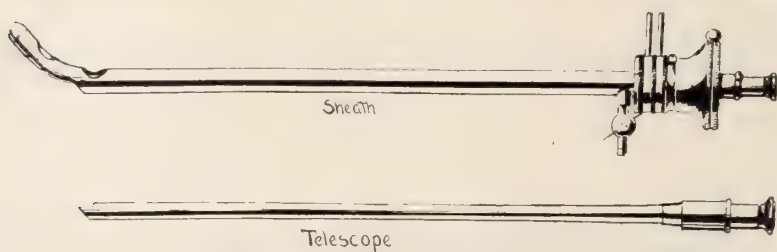


Fig. 8. Koch-Preston-1898 (air)

no longer. Even aside from Boisseau having anticipated him by ten years in presenting the double-barrel feature, his statement does injustice to Casper's cystoscope, which, first introduced in 1894, was improved in 1898 in a manner that presented a means of effecting double synchronous catheterisation by the sliding removable cover to the catheter channel. His directions were that, one catheter being inserted, it was to be extruded from the groove by the withdrawal and reintroduction of the slide, after which the second catheter was to be introduced into the other ureter at the same sitting.

As to proposition 2, that Brown's "composite cystoscope (Fig. 15) involved a wholly novel departure from all preëxisting types," it would seem proper, first, to search Dr. Brown's writings to learn what those features are that are so startlingly original and wholly novel. We read, immediately after the above declaration, that "The first essential change lay in getting rid of the old-time terminal window at the vesical end of the sheath followed, then, by the use of different kinds of interchangeable telescopic tubes for the same common sheath." It would seem that the duty of supplying a wholly novel departure from all preëxisting types is hardly fulfilled by getting rid of an old-time

terminal window. In reviewing the several sheath instruments that preceded Brown's of 1901, as indicated in the accompanying drawings, it is to be observed that the old-time terminal window appeared in only one, the Brenner,—certainly not a widespread error, to say the least.

We therefore search further for the originality claimed, on which must hinge the wholly novel departure from all pre-existing types; and the next evidence we find of it (*ibid*) is in the use, as he says, "Of different kinds of telescopic tubes for the same common sheath. Up to the present time its development on this basis has resulted in giving three complete cystoscopes for different purposes, adjustable to one sheath." Verily, Dr. Brown must not have been acquainted with, or must have forgotten, the

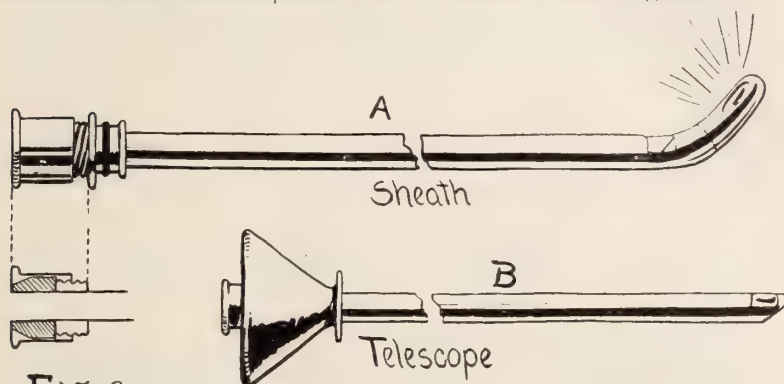


Fig. 9.

Schlagintweit

Catheter-cystoscope. (1899)

sheath cystoscopes that had gone before him, or he would never have made such a claim. Boisseau's instrument presented the sheath and multiple-telescope system as plainly as language and artistry could delineate them; in addition to which there were a number of others who made use of the sheath-and-telescope plan, antedating the 1901 instrument of Brown. Preston, of Rochester, in 1898, submitted a sheath and multiple telescope instrument (Fig. 8) to be used with air distention; an instrument that created wide interest and attention throughout this country, and must necessarily have been brought to Dr. Brown's attention.

Other instruments of sheath-and-telescope pattern that antedated Dr. Brown's of 1901 may be mentioned as follows:

1. Güterbock, 1895 (Fig. 4), *Berliner Klin Woch.*, No. 29, 1895.
2. Fenwick, about 1896 (Fig. 5), *Clinical Cystoscopy*, p. 38.

3. Nitze's Evacuation Cystoscope, 1897 (Fig. 7), *Centralbl. f. d. Krankh. der Harn und Sex. Org.*, 1897, Hft 7, p. 369.
4. Albarran, 1897 (Fig. 6), *Revue de gynecologie de Pozzi*, No. 3, May and June, 1897.
5. Koch-Preston, 1898 (Fig. 8), Byron Robinson, "History of Cystoscopy," *Detroit Med. Journal*, October, 1904.
6. Lang, 1899 (Fig. 11), *Wiener Med. Presse*, 1899, Nos. 27 and 28.
7. Schlagintweit's Evac. Cys., 1899 (Fig. 9), *Centralbl. f. d. Krankh. der Harn und Sex. Org.*, 1900, p. 130.
8. Kollmann, 1900 (Fig. 12), *Centralbl. f. d. Krankh. der Harn und Sex. Org.*, 1900, p. 472.
9. Wossidlo, 1900 (Fig. 14), *Centralbl. f. d. Krankh. der Harn und Sex. Org.*, 1900, p. 461.
10. Bransford Lewis, 1900 (Fig. 13), *Jour. of Cutaneous and Genito-urinary Diseases*, 1900, p. 420.
11. Tilden Brown's composite, 1901 (Fig. 15), *Medical and Surgical Report of Bellevue Hospital, New York*, Vol. I., Jan., 1905; *Medical and Surg. Report of Presbyterian Hospital*, Jan., 1902.

It will be observed that all of these instruments follow after the sheath-and-telescope plan of Boisseau, with individual variations as to details of construction or assembling, and adaptation to different individual objects. This unavoidably close relationship between cystoscopes was recognised and conceded by me in making my presentation, in 1906, before the American Urological Association at Boston, of my universal cystoscope (Fig. 16). Instead of making any claim for originality, the opening paragraph¹ of that introduction was a definite disclaimer in that respect. It says:

In presenting the next candidate for cystoscopic favor, I do so with the full realisation that there is no yawning vacancy in the cystoscopic field; that "there are others" already in the field; also that it is difficult to find anything really new and original, at this date, in the cystoscopic world; that most of the supposed "new" features are simply modified settings or assemblings of features already made use of. It is not desired to lay any especial claim to priority or originality in this instrument; utility is its basic principle.

My idea was that if the instrument as submitted should be found useful it was at the disposal of the profession; if not, it could easily be retired into innocuous desuetude. But the point of importance here is that in view of the intimate and involved relationship existing between the many cystoscopes on the market, no claim to exclusive individuality or originality could be maintained by any except by Nitze for the fixed-lens system, and by Boisseau for the sheath-and-telescope system. All of the other cystoscopes are but modifications of these two, some good, some bad, the survival of the fittest no doubt best determining the advantage between them.

1. *American Jour. of Urology*, December, 1906.

It remains for us, therefore, to make still further efforts at discovering the features of Dr. Brown's composite cystoscope, that involved a wholly novel departure from all the preëxisting types. I confess my inability to discover a single one. The irrigating features were supplied in several different ways by the sheath instruments depicted in the accompanying drawings.—

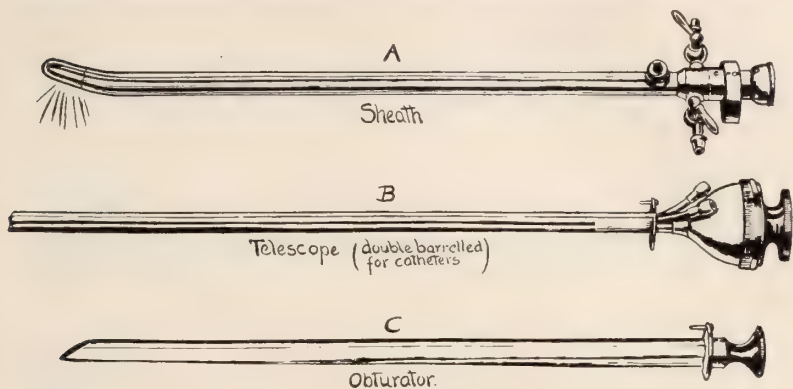


Fig. 10. Tilden-Brown-1899.

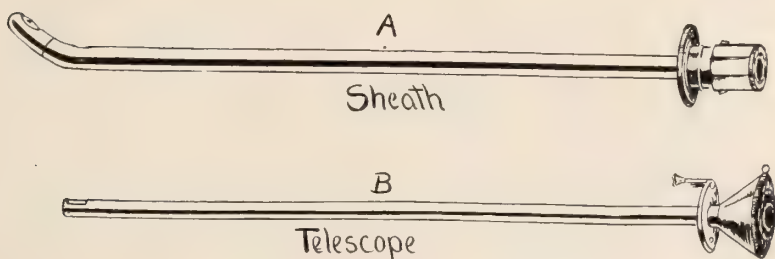


Fig. 11.

Lang (1899)

some with cocks, some with inner tubes for irrigating channels. The differing modes of making the connection with the electric cords are, of course, of little moment, and would not serve as an indicator of particular individuality in a cystoscope. Dr. Brown at first conducted his catheters in closed channels, applied to the lower part of the straight-view telescope (Fig. 10); later, whether receiving his inspiration from Bayard Clark, as he says, or from Follen Cabot, who proposed the change in 1904.

he adopted the mode of partially fenestrating the catheter tubes, leaving them open until a bridge is reached at the distal end of the telescope. This differed from modes adopted by others for carrying the catheters, but the difference was hardly sufficient to stamp it as a wholly novel departure from all the preëxisting types. Besides, whose was the credit for the plan finally settled on, and later pictured in Brown's illustrations? (Fig. 15). Not his, by his own assertion.

If, in the extremity of our endeavor to discover the half-mark of originality, the identity of the "wholly novel departure," we are forced to the brink and name it as the peculiar mode of

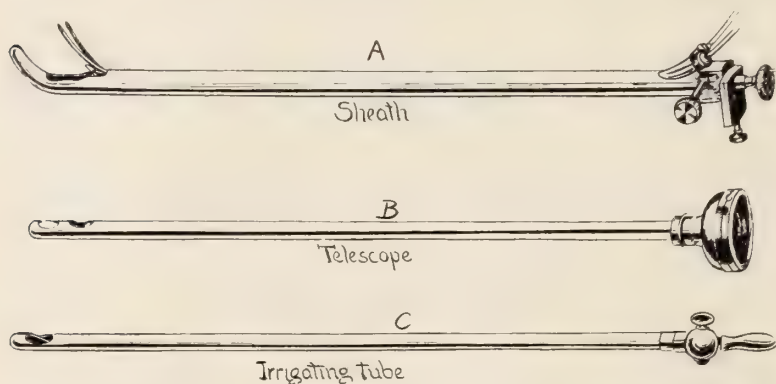


Fig. 12.

Kollmann — 1900

applying the lamp to the sheath,—having the lamp constitute the tip of the beak, as used by Brown, 1901,—we are again doomed to disappointment, because Casper¹ and others tell us that exactly that arrangement was applied, in 1880, by Dittel to Nitze's early cystoscopes (Fig. 17); and the Nitze-Dittel cystoscope of 1887, exhibiting that arrangement of illumination, was the outcome. This is one of the classic illustrations used in the earlier writings on cystoscopic history. The lamp formed the tip of the beak; and, as Casper says, this arrangement served well to assist in eliminating the necessity of a cooling apparatus required in connection with the previous plan.

With these facts of cystoscopic history recalled and acknowledged, as answering the first two propositions, the third, I take it, falls of its own weight. In assembling my universal cystoscope I was not reduced to the necessity of appropriating Dr. Brown's composite cystoscope, because there was nothing

1. Casper. *Handbuch der Cystoscopie*, 1898, p. 16-17.

original in it; like so many others, mine included, it was but a rearrangement of ideas that had already been employed time and again; that have been made use of many times since 1901; and that will be made use of many additional times in the future. The accompanying illustrations of various cystoscopes verify this,—if verification is needed.

One question seems pertinent here—namely, why should I, more than others of the many who have ventured into the field of cystoscopic devising, be so vigorously held to account for having used, in common with Dr. Brown, cystoscopic features that have been handed down from one "originator" to another for a decade? It is true, his big stick has on previous occasions been shaken over the heads of others for their temerity and, having received their chastening, they have retired to dream dreams, but none, so far as I know, have had the honor of such assiduous and pointed attention as I.

However that may be, I am willing to answer the third proposition on its merits and describe wherein my universal cystoscope

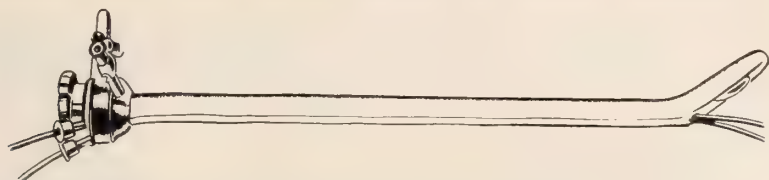


Fig. 13. Bransford Lewis Air Cystoscope

of 1906 differs from Brown's of 1901, sufficiently to warrant the name it has received. The illustrations themselves (Fig. 15 and Fig. 16) refute the absurd claim that Brown's composite was "the identical instrument which a St. Louis cystoscopist had recently appropriated and was presenting as his universal cystoscope." The following are distinctive differences, as compared with Brown's composite:

First, double fenestration of the beak, instead of the lamp composing the beak. This not only affords better protection to the lamp and its glass chamber, but permits the setting of the lamp upside-down, so to speak. Instead of diffusing its light upward and away from the areas most desired for inspection, as in Brown's (or rather, Dittel's) arrangement, the reversal of the lamp sheds the light most intensely below, on the trigonal area embracing the ureters, bas fond, and other parts most frequently affected with pathological processes; above, toward the prostate and anterior vesical neck, likewise important.

This arrangement of the lamp also permitted the use of a shorter catheterising telescope, which in Brown's catheterising

telescope projected a half or three-quarters of an inch beyond the heel of the beak, in a very awkward way, often engaging the lens against the mucous membrane, causing a smear on its surface, and otherwise inviting objectionable results (Fig. 16). One very important one was, that the novice who forgot to withdraw this telescope into the sheath before withdrawing the sheath from the bladder, at once involved himself in trouble and his patient in possible harm. It was like extracting a deep uretral dilator without first closing it. At any rate, whatever the reasons or preferences on the subject, these were essential differences between our instruments.

It would seem that Dr. Brown has come to realise the large advantages incident to this setting of the lamp and the double

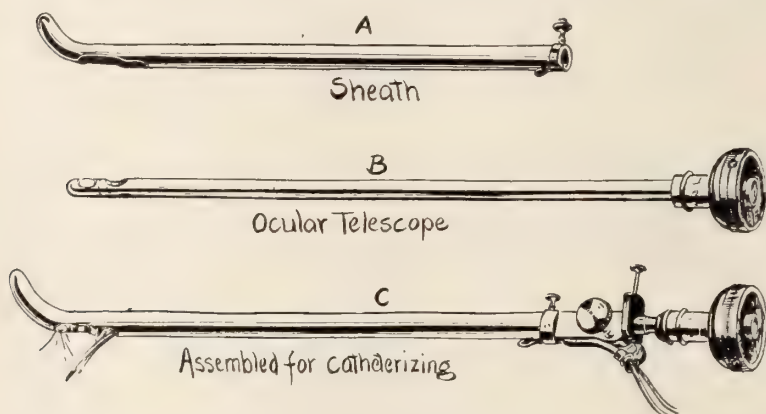
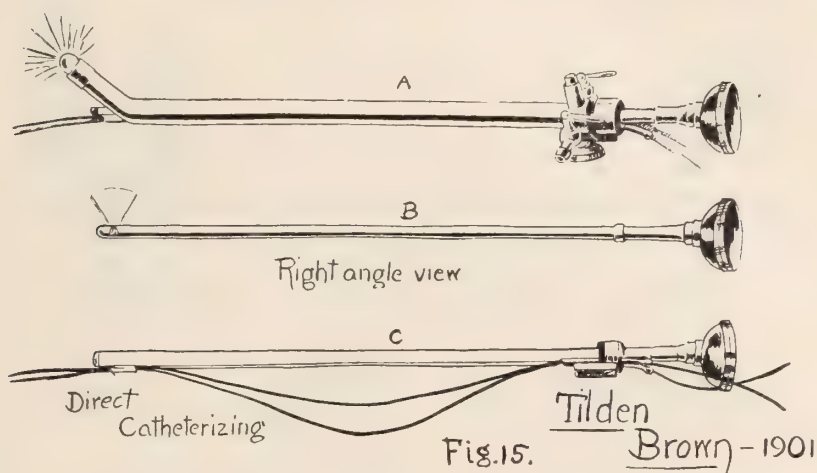


Fig. 14. Wossidlo-1900

fenestration of the beak, because in 1907 and again in 1908 while in New York I saw instruments on sale under his name, at his instrument makers, with exactly this arrangement, the lamp having abandoned the tip and being snugly ensconced in the beak itself, set upside down as in mine. If the two sheaths now appear identical, they have become so since the introduction of mine, in 1906, and without any change of form in mine since that time; the inference therefore is plain.

With reference to the direct catheterising telescope, instead of the enclosed catheter tubes at first used by Brown, or the fenestrated which he accepted from either Clark or Cabot, I made use of grooves open throughout but separated by a ridge. This added the space thus given to the telescope and catheter space, the sheath itself completing the walls opposite the grooves.

A more important advantage over the Cabot or Clark bridge arrangement than this was met in practice, when in manipulating a catheter it was withdrawn from under the bridge. Instead of readily and invariably finding its way back into the channel, then pushed forward, it would often become engaged against the bridge, finally requiring the withdrawal of the whole telescope with its catheters to place them again under the bridge. I have seen this happen in the hands of experts with the instrument, so that it is not merely a theoretical objection. In my double grooved channels, no obstacle presents to the progress of the catheters at any point after they are introduced into the channels.



With reference to the other telescopes, I have insisted that sufficient space be preserved between the telescope and sheath wall to permit of free exchange of fluid during the work of the operator, whether that be effort at catheterisation or universal inspection with the several telescopes.

In his 1905 reprint, previously mentioned, page 370, Brown says of his composite pattern: "In this the sheath is cylindrical and the examining telescopes fit its lumen snugly, but the catheterising telescope has here to be reduced to a size less than the diameter of the two catheter canals." It is obvious that the snug filling of the sheath by the telescopes leaves no room for the passage of fluid between the two; and that a factor of much value during manipulation is lost thereby.

The retrospective telescope that is common to both instruments has apparently been the occasion of much heat and worryment to Dr. Brown. Whether Dr. Brown or I first suggested the adaptation of the globular lens to a telescope to secure the retro-

spective view, I know not and care little. I have never made any particular effort to substantiate a claim on the subject, and do not wish to do so now; but I submit the following extract from a letter written under date of June 14, 1904, by the Wappler Electric Controller Company, who made both of our instruments, and should be in position to know the facts: "Dr. Brown and Dr. Cabot are laying the greatest stress on the catheterising feature, and we think the credit belongs to you (Lewis) of suggesting an instrument with the highest grade of retrovision. This we tell every physician who wants to know it. As an examining and irrigating instrument, pure and simple, we can produce one

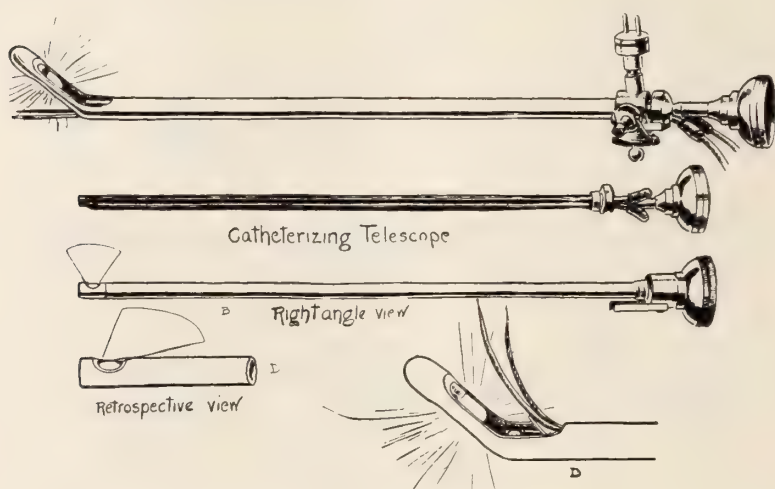


Fig. 16. Bransford Lewis Universal Cystoscope — 1906.

in which your name can be sustained, and we propose to advertise it as the Bransford Lewis Examining Cystoscope."

My first published reference to this retrograde telescope was in 1904 in the *Saint Louis Medical Review*, of December 24, in "Report of a case of hypertrophied prostate." If Dr. Brown published the use of that telescope prior to that time I am not aware of it, and should be glad to have him inform me on the point.

But whether he did or did not, would not invalidate the individuality of my universal cystoscope. Without originality being proclaimed for it, this instrument had at least as much to distinguish it from others as Dr. Brown's instrument, for which claims for unique originality have repeatedly been made—even to the extent of declaring that it "involved a wholly novel departure from all the preëxisting types."

One more feature connected with my universal cystoscope requires explanation, that is, with reference to the indirect catheterising telescope. Directions and specifications for the making of this feature to be used in the same universal sheath, were given to the Wappler Electric Controller Company in January, 1907. The comparatively simple mechanical difficulties connected with the feature have been overcome in a number of other instruments, both of the direct and indirect catheterising plan, for the past several years,—notably Freudenberg's, Wossidlo's, Casper with Schiffka's modification, etc; so that there was no reason to expect undue delay in the production of the feature. Working models were evolved and submitted to me, some being found acceptable, with slight corrections; and so confident was Mr. Wappler of his ability to bring it to prompt completion that the following note was written me on the subject, under date of



Fig. 17.

Nitze-Dittel 1887
Lamp at tip of beak

April 2, 1907: "Replying to your favor of 30th ult., beg to state we can furnish the new sheath with indirect catheterising arrangement in about two weeks." Signed, Wappler Electric Controller Co.

What motives or influences have prevailed to prevent the production of this feature of my instrument I can not say; but the unreasonable and inconceivable delay finally resulted in a severance of our relationship and my authorisation of the Kny-Scheerer Company to make the instrument. This tempest in the cystoscopic tea-pot has occurred since that time.

From the above considerations it would seem that the relative positions of Dr. Brown and myself are, that he has been claiming originality and priority that were never due him; and has, after two years, suddenly waxed indignant, and now reproaches me for having used, in accordance with my own ideas, individual cystoscopic features that were present in his instruments and also antedated his from three to ten years. Finally, that the introduction of my cystoscope was unaccompanied by any proclamation of originality, but was submitted wholly and only on the basis of utility.

Obstetric Surgery.¹

By DEWITT G. WILCOX, M. D., Buffalo, N. Y.,

Surgeon to Buffalo Homeopathic Hospital; Gynecologist to Erie County Hospital;
Surgeon-in-Chief Lexington Heights Hospital.

ONCE eliminate the preventable defects consequent upon the parturient stage, plus the diseases resulting from gonorrheal infection, and the gynecologist would be legislated almost out of office. No man should practise obstetrics, who is not enough of a surgeon to meet the ordinary complications which a minimum number of obstetrical cases is bound to present. Not that every man should be able to make a Cesarean section, but every man should possess enough manual dexterity to enable him to leave the parturient woman in such a state of physical perfection, that she would not in a few years be a neurasthenic or victim of the operating table.

The writer is prone to believe that the average obstetrician of the smaller communities does not fully appreciate what percent of his parturient patients eventually become victims of the operating table. He is, in too many instances, content to point with pride to his brilliant record of ten or more years of obstetrical practice without a death, forgetting that not alone is he responsible for the mother's life, but in a large measure is responsible for the future good health of that mother, so far as her pelvic organs are concerned. The most frequently observed defects consequent upon the parturient stage, are the lacerated perineum and cervix.

There are instances where a delay of twenty-four hours, or even a week, in repairing the perineum, is not only admissible, but essential to success; but probably in 90 per cent. of instances, immediate repair can and should be made; nor should this repair be done hurriedly and without painstaking effort, for a half healing is but little better than no healing at all and means a subsequent operation. The careful adjustment of each separate muscle and fascia to its fellow of the opposite side, is imperative if good results are to be obtained.

While it is to be assumed that every obstetrician goes to his parturient patient fully prepared to repair a torn perineum,—and anything less than that renders the attendant censurable,—yet there are many instances where through lack of competent assistance, inadequate light, an exhausted patient, and the great tumefaction of the soft parts, due perhaps to a prolonged forceps delivery, that a delay of a day or two may be the means

1. Read at the annual meeting of the Maryland State Homeopathic Medical Society held at Baltimore, October 23, 1907.

of securing better results. But before deciding to postpone the repair, he should thoroughly satisfy himself that there is no bleeding from any sizable artery at the seat of rupture. A few buried sutures of ten-day iodised catgut will suffice in bringing together subcutaneously the ends of the separated muscles; then two or more silkworm-gut sutures passed through and through will hold the entire perineum firm and steady. Under no circumstances should silk be used as suture material, as it readily absorbs the infection from the uterine discharge and carries such infection into the deeper layers of the wound.

The after-care of a repaired perineum, whether it be recent or old, is a matter of prime importance. Upon the nurse or attendant there devolves the responsibility of keeping the perineal wound dry and clean. The uterine discharges from a recently emptied womb are quite likely to infect the wound and retard healing. This can be avoided only by changing the dressings frequently, keeping the wound dry and aseptic, and the parts as free from motion as possible. The oft repeated statements made by our older obstetricians, that they have practised obstetrics, ten, fifteen, or twenty years, without having a ruptured perineum, is an acknowledgment of stupidity, for it proclaims an inability to recognise such a condition when existing. In a certain per cent. of cases, a torn perineum is bound to occur, no matter how much skill is employed to avert it, and those cases are so evenly distributed over the country that it is scarcely possible one man will be so fortunate as to escape finding one in twenty years practice.

The immediate repair of a lacerated cervix is an open question. The weight of opinion is overwhelmingly against such a procedure. We have, in the cervix, a different structure to deal with, as well as one differently located; ordinary laceration tends to heal spontaneously, and those so badly torn that they fail thus to heal, would probably not heal if sewed. The lips are tumefied, the structure soft, and a ligature, especially if tied tightly at first, would soon become loose after the tumefaction subsided. While a late operation is best for repairing the cervix, yet it should not be postponed longer than is necessary for the woman to gain strength and be in a condition for such an ordeal. The sooner it is done, the less liable is she to suffer reflex irritability. Three months should be the maximum time allowed before repairing a lacerated cervix. There is one condition, however, which calls for immediate repair of the cervix, and that is profuse bleeding from the circular artery or possibly the uterine artery. When such is the case, it is essential to the safety of the mother, that the cervix be repaired immediately.

Next in order comes subinvolution, that forerunner of uterine displacements, pelvic congestion, and general pelvic distress. Days or weeks are not the true index governing the lying-in period of the parturient woman, but rather the process of involution. What may be a long period to one woman becomes short to the next, simply because her uterus has not had sufficient time to regain its normal size. No better foundation could possibly be laid for a future operation than to allow a parturient woman to get out of bed, go about her duties, indulge in marital relations and otherwise take her place in the family, when the uterus is still large, flabby and filled with unabsorbed and hyperplastic connective tissue. Rare indeed, would be the instance wherein such a woman did not eventually find herself seeking the assistance of the gynecologist to aid her in overcoming a retrodisplacement, prolapse, procidentia, or chronic endometritis.

Not infrequently does the opportunity come to the obstetrician, to cure at the time of his patient's confinement, a previously existing retrodisplacement. A uterus which has been so displaced, and is large and flabby, becomes after confinement a very tractable uterus, freely amenable to a line of treatment which was not possible before confinement, and which may forever cure the patient of her difficulty, and possibly avert a future operation.

Naturally, all the adhesive bands have been broken up by the gestative process. Naturally, also, has the overabundant connective tissue been absorbed and the overdilated bloodvessels become pliable and ready to contract. By the thorough removal of all membranes and shreds from the uterine cavity, by keeping the patient off her feet longer than the usual time after her confinement, by the employment of frequent hot douches, by the judicious use of tampons, the knee-chest position, having the patient lie on her stomach rather than upon her back, and by continuing the nursing of her child at the breast, such a condition as chronic subinvolution or displacement can be cured at the time of confinement.

The discovery of the cause of the various infective diseases of the fallopian tubes, ovaries and uterus, such as pyosalpinx, infective ovaritis, endometritis, salpingitis, and the like, has opened our eyes to the great risk which the parturient woman runs of becoming a chronic invalid, and later a victim of the operating table, through puerperal infection of the uterus and the uterine adnexia. It would seem almost like arrogance on my part to suggest the necessity of strict asepsis in the practice of midwifery, as that is a recognised and undisputed duty of the obstetrician. If medical science has demonstrated anything to our entire satisfaction during the last decade, she has forced us to a recog-

nition of the power of bacterial invasion through the medium of the uterine mucosa. Yet the indifference to this truth, displayed by a certain few of the obstetricians, even today, results in no small percentage of their patients eventually requiring an abdominal section for the removal of infected tubes or pelvic adhesions, which have rendered said patients semi-invalids for a period of years.

Experience and observance in pelvic work have convinced the writer that no woman can suffer an attack of puerperal fever of average severity, without being left permanently damaged in some of her pelvic organs. The facts that she may recover from the immediate attack, that she may be able to bear more children, that she is apparently able to perform her regular duties, are not sufficient arguments to sustain the contention that she has not been so damaged. As the mills of gods grind slowly, so does the latent infection consequent upon puerperal fever develop slowly but exceeding sure. After the initial attack the patient may appear to be well and years may elapse ere the trouble shows itself, when suddenly, after a severe cold, an overstrain, a miscarriage or the advent of the menopause, there develops alarming symptoms, which only an abdominal section can assuage. Then is laid bare the whole story from the beginning, with its startling moral—inflamed adherent tubes; chronic pelvic peritonitis; a retrodisplaced uterus with unyielding bands of adhesions or a tubo-ovarian abscess, all or any one of which was the result of the latent infection planted years ago at the parturient period, and all of which might have been averted by a recognition of, or a careful attention to the unfailing law of bacterial invasion through the uterine mucosa, at the time of confinement.

There are a few operations, which must occasionally be performed during or at the close of the pregnant stage. First, is that delicate procedure which, while it is but rarely demanded, is nevertheless of sufficient importance to entitle it to careful attention; but strange to say, it has received but scant consideration from the men who are best qualified to speak upon it. It is the induction of abortion and miscarriage.

It is but natural and therefore commendable that the honest doctor should shrink from anything pertaining to the premature emptying of the uterus. The honest policeman shrinks from taking a human life, even though it be to save another, yet he must occasionally do it in the discharge of his duties. So the physician, who is the policeman against disease and death, must at times sacrifice one life to save another apparently more valuable. In rare instances, such as a dead fetus, an intractable, adherent, retroverted uterus, a placenta previa, a fibroid tumor, cervical cancer, persistent and exhausting vomiting, dementia, Bright's

disease, or any condition which seriously threatens the life of the mother, it becomes absolutely essential to the preservation of the mother's life that the uterus be emptied before full term. It is here that our literature is scant as to the best method of procedure. Nature jealously guards her offspring. To induce a uterus to part with its incompleated product, is a task frequently difficult and fraught with grave peril. While nature may herself, as in the case of a dead fetus, recognise the difficulty and seek to expel it, yet her tardiness in the recognition and expulsion may cost the life of the mother; hence the physician must have at hand some reliable method of recognising the danger, and some prompt, efficient and safe method of emptying the uterus in just such unfortunate circumstances.

Given a patient who is afflicted with some of the above conditions, wherein a consultation of two or more physicians results in a verdict of abortion, what is the first move? Obviously, the selection of the time must be determined first. Early writers tell us it is better to empty the uterus at what would be the menstrual period, as the tendency to uterine contraction and placental expulsion is then greater. That argument is valid only in case we intend to induce artificial labor and not empty the uterus by force. If there is the possibility of delivering a viable child, then we may wish to induce artificial labor and the time of the month is a consideration; but with no prospect of a viable child, there is little necessity of paying any attention to the would be menstrual periods. The introduction into the uterus of foreign bodies, such as sounds, tents, gauze, catheters and the like, to induce labor, belongs to the antiquated period of septic carrying days, and is not to be considered as an excusable method, save perhaps in the first few days of pregnancy.

If an abortion is to be induced, and in using that word the writer means the emptying of the uterus at or before the fourth month there is just one safe, rapid and effectual method of doing it, and that is this: first a thorough bowel evacuation; second, cleansing the vagina and vulva, with shaving and douching; third, a general anesthetic, or possibly the injection of cocaine into the cervix. Then place the patient in the lithotomy position, with a good light. Sterile hands and instruments are of course essential. Retracting the perineum, by means of retractors, brings the cervix into view. This is seized with tenaculum forceps and held steady while graduated sounds are introduced one after another into the uterine cavity. A point of prime importance in the first introduction of a sound or dilator into the uterine cavity, is to know the position of the fundus. Failure to know this fact has resulted not infrequently in perforation of the uterine wall.

The introduction of a sound may or may not be an easy process, depending upon the rigidity of the os and the extent to which it must be dilated. The shorter the pregnancy, the more rigid the os, as a rule. I have seen cases, where it required one hour of the hardest kind of work to dilate the os sufficiently to deliver a four months fetus. After the sounds have done their work, the Goodell dilator comes next. If the thumbs can be employed after the dilators are of no further use, they no doubt afford the safest means of accomplishing the end, but frequently the os is so rigid that but little can be accomplished by that method. The free use of sterile oil or vaseline will facilitate materially the process of dilatation. The method of introducing one finger after another, by making a wedge of them, is very satisfactory. In the absence of any other instrument, I have found a Pratt rectal speculum as satisfactory as anything with which to complete dilatation. Recently my attention was called to the Newell dilator, which I have found extremely satisfactory. It is less likely to tear the surface of the os and dilates very uniformly.

When dilatation is sufficiently complete to deliver the contents, the size of the fetus determines the next step. If it is three months old or over, some form of instrument must be used to seize the head of the fetus and deliver it in toto; otherwise it is torn to pieces and the danger of infection, lacerations and incomplete delivery is present. To meet this requirement the writer has had made a pair of miniature obstetrical forceps, just large enough to seize a three or four months fetus and deliver it without tearing. The lack of such an instrument has caused him, upon a few occasions, more annoyance and vexation than the complications of many a major operation.

After the delivery of the fetus but little difficulty will be encountered with the placenta if it is seized with placental forceps and carefully delivered. A brisk hemorrhage is likely to follow the placental delivery, but it is quickly controlled by the next step, which is a thorough curettage of the entire endometrium, to insure the removal of all shreds and a firm uterine contraction. The douche curet is ideal for this part of the work. No pains should be spared to free the uterus of all membranes. It is not a question of forcibly scraping the uterus, for that is unnecessary and harmful; but rather of reaching the entire surface, especially the two corners of the uterus. The use of strong chemicals in the douche water is unnecessary; salt or plain sterile water is quite sufficient. I make a practice of packing and draining every uterus thus delivered. The iodoform tape, one-half inch wide, with edges folded in and long enough to fill the uterine cavity, is sure to absorb and antidote all possible infection that may be gathered

there. This can be removed in twenty-four or forty-eight hours, according to requirements. A rest in bed, commensurate with uterine involution, is the only guide for convalescence.

The mortality attending such procedure is practically nil. If infection has taken place and becomes well established before the operation, then perforce it may continue to a fatal end in spite of the interference. In placenta previa, the management is much the same, only the work must be done with dexterity and despatch, to avoid the bleeding so generally present in such cases. The writer is of the opinion that it is better in such cases to empty the uterus forcibly and quickly, as above described, rather than to induce labor and wait for nature to expel the contents. The only modification to be made in the procedure, in the case of placenta previa, is not to introduce the sound or dilator further than within the internal os. After dilatation is sufficiently complete, the finger can be slipped alongside the placenta and detach it from the uterine mucosa. Its delivery then is a very simple matter.

In pregnancy complicated by fibroid tumors, much has been written. I have seen comparatively few cases in which the tumors were so situated as to interfere with normal labor; but I have seen many cases, where the patients had one or more fibroids, which did not in the least interfere with the parturient process. It is not always necessary to abort a woman who has a fibroid so situated as apparently to act as a bar to delivery. It is possible frequently to remove the tumor by abdominal section during the gestative stage, and thus best serve the interest of mother and child. It is surprising and gratifying to observe the surgical ordeals, through which a pregnant woman will pass, without miscarrying.

A paper on the subject of "Obstetric Surgery" would not be complete without at least a few words on that peculiar anomaly of pregnancy, ectopic gestation. It is a well known physiological fact that the uterus undergoes a certain preparation for the reception of the ovum each month. A few days prior to the arrival of the expected guest, that organ cleans house, as it were, and adds new interior furnishings; old shreds of membrane are cast off and a new heavy lining, of a velvety character, richly supplied with blood connections, is formed in the upper part of the uterine cavity; this is the decidua. If the ovum arrives as guest in ordinary (that is, unimpregnated) then the new furnishings are torn down and cast off, and form part of the menstrual flow. If, however, the ovum comes as a royal guest, (impregnated and developed up to six or eight days) then is the reception made fitting to the ovum. The doors and windows of

the decidua are closed, to prevent the untimely escape of the ovum, or intrusions from without. Richer blood supply is added and the velvety hangings are materially increased in thickness. One corner of the reception hall is set aside for the guest, where he is permanently stationed and sumptuously fed. This guest, the ovum, sends out rootlets or villous growths, which ramify into the decidua and the circulation between uterus and ovum becomes established.

It becomes a most entertaining sight to the scientist to watch the conduct of affairs when the host (uterus) has been assured that a royal guest will soon arrive and the latter fails to keep his appointment. The ovum, impregnated in the tube in the usual way, sends couriers ahead, announcing its early arrival in the uterus. That organ makes immediate preparations to receive the guest. The eight days expire but the guest has not appeared; ten days and two weeks, yet he fails to come. The furnishings and hangings are wrought more elaborately, as though that would hasten him. The uterine decidua has attained two or three times its normal size, but at the end of four, or perhaps five weeks, no guest has appeared, and in disgust at such uncivil treatment, the host ruthlessly tears out all evidence of the elaborate preparations and casts them forth. The decidua has been expelled, and here note that we have in this act, one of the most positive signs of tubal pregnancy. This decidua may be the size of a placenta in a three months uterine pregnancy, and the physician, if he is not alert, will be induced to think he is dealing with an ordinary abortion and may search long and carefully for a fetus, which comes not.

We now go back to the ovum and see what sort of treatment it has received at the hands of the tube, which has aspired to the dignity of entertaining the royal guest, who had intended making there only a short sojourn on the road. This tube, recognising that it must prepare a fitting chamber for one of honor has, upon short notice, added new furnishings, which heretofore were foreign to so humble a house. A tubal decidua has formed about the ovum, which has increased in size as the ovum grew, until at the end of two or three weeks, she is able to provide her guest with all the nourishment and necessities that the royal palace of the uterus could provide, only in cramped quarters. But the ambition of the tube has not reckoned with her capacity or powers of endurance, for the royal guest has so increased in size that the walls of the house are full to bursting, and impending disaster threatens.

A scarce never failing sign of ectopic pregnancy is an impression which the patient has that she is pregnant. Particularly

is this present if she has borne children. She will state that she has a peculiar, indescribable sensation in the pelvis; the abdomen is slightly sensitive; there is a pain in ovary or tube upon bowel movements; there is some increased frequency of urination. She may or may not feel nauseated, but is likely to feel so after four or five weeks have elapsed. The time comes for her to be unwell, but no flow appears. If her habit be that of prompt regularity, this is almost a positive sign of pregnancy, but not necessarily of tubal pregnancy. In two or three days her anxiety is relieved by discovering a little flow, but this ceases perhaps after six, twelve, or twenty-four hours. This flow is caused by the uterus in its attempts to get rid of the unnecessary decidua for, be it remembered, that the ovum now impregnated in the tube, may have been lodged there four weeks previous, at the last menstrual period, and at the present moment, although she has missed but one period by a few days, she may have an ovum of four weeks development in the tube; hence, quite a decidua has formed in the uterus, which that organ is endeavoring to cast off. This periodic irregular flow of blood is an important sign.

Most of the above symptoms give the physician a suggestion that the patient is pregnant normally, but this show of blood a week or so after the period is due, should arouse his suspicions that all is not right. He need not wait long for a confirmation of these suspicions; it will come if he is watchful. Next, he is told that there is more flow, which, like the other, lasts a few hours and then ceases, or may appear only when the patient is on her feet. She complains of an unpleasant sensation in the right or left ovary; it has become more sensitive, she avoids sudden movements or jars. About this time the patient may have sudden severe sharp pains in the sensitive side; these may be of a character to make her scream out in agony or fall in a faint on the floor. These pains may be repeated in a few hours or days, or may only come when she makes an exertion, but with each pain she is quite likely to have a little uterine flow. Now it is not to be understood that this pain means a rupture of a tube, because one tube cannot rupture every two or three hours or days; but it does mean that the tube has become as full as it will hold with the constantly increasing ovum as a guest, and because it cannot further stand such internal pressure, its peritoneal covering has begun to tear in places and the consequent pain results. Each one of these tears seem to stimulate the uterus to contract, hence we have an external show of blood.

If a physician sat at the bedside of a patient, whom he had never before seen, and she related to him such symptoms as above mentioned, he could not be excused for failing to recognise the

true condition; but if he were in doubt he has the means at hand for satisfying himself beyond all question, and these are: the discovery, by a bimanual examination, of an enlargement to the right or left of the uterus. This may be as large as a walnut, a lemon, an orange, or it may be balogna shaped. It is extremely sensitive and must be handled carefully. It will also be made known by the examination, that the uterus is enlarged almost to the extent of the duration of the suspected pregnancy. The cervix will be soft and will be purple in color like a normal pregnancy. A few days later the physician may be told by the patient that her troubles are over, as everything has come away, and she shows him what appears to be an afterbirth. It is so nearly like it that he may not detect a difference, but his precaution will induce him to make an examination. He finds the so-called placenta is, in fact, a thin membrane, rather tent-shaped, which he can slip over his finger, and that it has not the characteristics of a placenta. He finds that while the uterus is smaller than before, there is still the same lump in the side, just as sensitive, and she still has her symptoms of pregnancy. It was the decidua which has come away and not a placenta, due to an abortion. Moreover, she will still continue to have her agonising pains, after each one of which she feels faint. She shows clearly the loss of blood; her lips are pale; her eyes hollow and she is constantly thirsty.

We will now suppose a period of from six weeks to two months has elapsed since the suspected pregnancy began. An urgent call reaches the physician to come to his patient immediately; she is dying. He finds her pulseless, blanched, breathing softly, cold and clammy. A friend says, "She screamed out with agony, put both hands over her lower abdomen, tried to get up and fell back fainting." We have now come face to face with an issue which nature has been predicting so forcibly, if we could but understand her language.

The tube has ruptured from end to end, or such portion of it as contained the fetus. The thousands of little rootlets, which carried blood from the lining of the tube to the tubal decidua, have been torn open and are pouring quantities of blood into the abdominal cavity; or the ovarian artery may have been ruptured also, and thus is the hemorrhage increased. Even yet the patient is alive, hence there is hope of saving her, and it is far better to recognise the true condition and apply the remedy, even at so late an hour, than to allow it to go unrecognised and death ensue.

It need not be said that the one remedy is a rapid abdominal section, securing bloodvessels, turning out clots, getting the patient back to bed as quickly as possible and giving normal saline enemata or intravenous injections, together with all other means

for combatting shock. But how infinitely better to have determined the question earlier and applied a similar remedy with one hundred chances in favor of success.

Were I to detail all operations complicating pregnancy, I should prolong my paper far beyond the time limit. Cesarean section, either abdominal or vaginal, is so rarely demanded, that it is interesting to the surgeon only; yet the mortality of this procedure is now so low and the results to mother and child so gratifying, that it should always be considered before determining upon a premature delivery, because of a deformed pelvis.

Symphyseotomy has a logical place in difficult or impossible deliveries, and can be performed quickly and safely.

The one thought of the paper is that the obstetrician has it in his power to so conduct all the details of his obstetrical practice that but a minimum number of his patients need ever become victims of the operating table, or neurasthenics.

173 LEXINGTON AVENUE.

Report of a Case of Chronic Inflammation of the Vesiculæ Seminales.

By JAMES A. MACLEOD, M.D. Buffalo, N. Y

THE vesiculæ seminales are liable to both acute and chronic inflammation. The inflammation is usually secondary in character, the infection taking place by simple extension either from the epididymis through the vas deferens or from the posterior urethra through the ejaculatory ducts.

The common causes are: (1) Gonorrhea; (2) Septic infection; (3) Tubercle.

Gonorrheal inflammation is generally secondary in character, the infection extending from the posterior urethra through the ejaculatory ducts; it is quite possible, however, that it may in a few cases be tertiary in character, the infection extending from a gonorrheal epididymitis, which was secondary to a urethral disease. It is very liable to become chronic and it is exceedingly difficult to affect a cure.

Septic inflammation is always secondary in character, the infection extending from a septic posterior urethritis through the ejaculatory ducts. Tubercular inflammation is usually secondary to tubercular disease of the epididymis or of the bladder, the infection extending through the vas deferens or ejaculatory ducts. Rarely is the disease primary.

The acute inflammations are treated by rest, by free action of the bowels, by the application of heat through the rectum and by the administration of salines and sedatives. The chronic inflammations are treated by tonics, by stripping the vesiculæ of

their contents by digital massage through the rectum and by hot rectal douches.

Mr. "X" consulted me October 31, 1904, complaining of hemorrhage per urethra coming on during or after sexual excitement. He stated that he was quite healthy up to the year 1901, when he had, for the first time, a hemorrhage from the urethra. On that occasion he was sexually excited and the bleeding occurred unconsciously to him without pain. The hemorrhage recurred from time to time over a period of one and a half years. He was treated by a prominent genitourinary specialist for many months. His bladder was washed out two or three times a week, and he was forbidden sexual intercourse. No examination was made per rectum.

This patient stated that he was of a very passionate nature, working himself up, at times, to a high pitch of excitement and that up to the time of the first hemorrhage he had given free license to his physical passions. The hemorrhage did not however occur during or after sexual intercourse, but during or after conditions of intense sexual excitement in which coitus did not take place. A distended condition of the bladder was always associated with these conditions. He denied ever having had a urethritis, simple or specific.

His condition on consulting me may be best described by quoting my case notes as follows: The patient is a somewhat thin, fairly well nourished man but with a pale and pasty skin. He has a normal temperature and a pulse of 85 with good volume and tension. The tongue is clean, the appetite is good, the bowels are regular and not constipated. The physical signs in regard to the chest and the abdomen are nil. The testicles, epididymes and the vasa deferentia are not tender nor do they give any evidence of induration. The urethra and the bladder are normal to the sound. The urine is acid with a specific gravity of 1016, and has no albumin, pus or blood.

The rectal examination discloses that the sphincters ani are very tight; the prostate is not enlarged; the vesiculæ seminales are enlarged, tortuous, tender and stony hard. After gentle massage of the vesiculæ a mucus discharge was expressed through the urethra. The mucus was examined microscopically and demonstrated numerous pus cells, a few dead or nearly dead spermatozoa, a few blood corpuscles, but no microorganisms could be detected.

The blood was examined but nothing was demonstrated except a marked lowering of the hemoglobin percentage. I then sent him to Dr. J. Henry Dowd for cystoscopic examination, and he reported the bladder to be normal.

Mr. "X" was treated by tonics, by massage of the vesiculæ by the finger and rectal staff, and by hot rectal saline douches. He was advised to avoid situations in which he might become sexually excited and he was advised not to allow his bladder to become over distended. These measures were continued up to January 15, 1905, when his condition was much improved; the vesiculæ were much softer, more easily stripped of their contents, but were still considerably indurated and much larger than normal. The strippings revealed nothing of pathological importance. The treatment was not kept up so rigidly thereafter, but examinations were made from time to time up to September 15, 1905, when the condition was in much the same state as at January 15, 1905.

He resumed sexual intercourse and again gave unbridled license to his physical passions up to September 1906, when he had a recurrence of the bleeding. Examination again revealed the vesiculæ enlarged but not tender, hard but not stony hard as they had been two years previous. The strippings were examined; blood and pus were demonstrated. Treatment similar in character to that used previously was again instituted. On November 23, 1906, Mr. "X" had a hemorrhage following a condition of intense sexual excitement and distended bladder. Thereafter the condition gradually improved until the vesiculæ became quite soft and easily stripped of their contents, which showed nothing of pathological importance.

On March 24, 1907, much to my surprise, a copious hemorrhage occurred following a condition of intense sexual excitement and full bladder. The question of operation arose, as it had a number of times before, but I decided to postpone operative measures until I had made an opsonic investigation. The strippings were examined and nothing of pathological importance was found, but on cultures being made a good growth of streptococci was obtained with a few isolated colonies of staphylococci; a bacillus was also noticed. The streptococci were exceedingly difficult to grow and to keep alive. The opsonic index to both the bacillus and the staphylococcus was normal but that to the streptococcus was extremely low, about .3. Separate vaccines were prepared from the staphylococcus and the streptococcus for the reason that it is necessary to give larger doses of the staphylococcus and also that it is necessary to give the streptococcus more frequently than the staphylococcus.

On May 7, 1907, I injected 20 million streptococci and 100 million staphylococci; twenty-four hours afterward, without warning, an exceedingly copious hemorrhage occurred. Thereafter I injected 10 million streptococci every other day and 100 million

staphylococci twice a week, no other treatment being employed. His condition gradually improved, his weight increased, his hemoglobin percentage raised up to normal; his vesiculæ became soft, decreased in size and were easily stripped of their contents, which proved, on examination, to be normal in character. The index to the streptococcus was raised and maintained at a high level by the appropriate doses of the vaccine as mentioned above.

In conclusion, I would like to express the opinion that, in this case, there was a chronic ulceration of the vesiculæ seminales, involving not only the mucus membrane but also the submucus and muscular layers. How this ulceration arose I am not prepared to say but it was, undoubtedly, kept existent by the microorganisms discovered through the cultures made. The condition was aggravated by excessive sexual indulgence and the bleeding was caused by the rupture of small vessels in the bases of the ulcers. I would like to draw attention to the fact that, with the exception of the hemorrhage occurring after the first injection of the vaccines, the bleedings always took place during or immediately after a condition of intense sexual excitement associated with a distended bladder, but in which, however, intercourse did not take place. During such a state the bloodvessels in the region of the base of the bladder are greatly engorged, the blood pressure is high and the small vessels, mentioned above, are very liable to rupture. This gives a mechanical explanation to the actual bleeding and in my opinion such is the true explanation. In the case of the hemorrhage occurring after the first injection of the vaccines, the lowered vitality or resistance following an inoculation would explain the bleeding taking place without the usual raised condition of the blood pressure; but in addition I believe that there is a certain local congestion of the diseased part after an inoculation.

The anemia, demonstrated on several occasions by examination of the blood, was undoubtedly secondary in nature and improved as soon as the hemorrhages ceased to occur.

The treatment, especially the avoidance of conditions in which a high blood pressure existed, allowed the ulceration to improve and in fact to become quiescent but never becoming completely cured until the opsonic treatment was instituted. After the first inoculation all other treatment was stopped in order to give the procedure a fair and thorough trial. The general condition of the patient improved, *pari passu*, with the improvement of the vesicular disease.

The Proteid Iron Preparations of National Formulary, or the N. F. Propaganda, With Some Queries and Conclusions.

[Editorial in *Critic and Guide*, June, 1908.]

INTRODUCTION.

THIS is a very important editorial. It is the most important editorial that I have written in several months. It deals with fundamental principles. It is going to present certain questions. And unless these questions are answered satisfactorily, our leaders in pharmacy, aided and abetted by some temporarily misguided physicians, will stand convicted before the world as engaged in a nasty business, injurious alike to pharmacy and medicine and criminally wrong as far as our patients are concerned.

I am entirely willing to be judged by this editorial as to my knowledge of the situation and as to my ability to reason fairly, logically and unanswerably. I am either right or wrong. If I am shown to be wrong, then I am unworthy to be a leader in medicine or in medico-pharmaceutical journalism, and the professors of pharmacy and therapeutics and the pharmacists in general who are paid subscribers to the *Critic and Guide* should show their displeasure by discontinuing their subscriptions. If, however, I am right, absolutely right, then this editorial should and will mark an epoch in American pharmacy and medicine (or rather medicinal therapeutics).

I have an unshakable belief in the invincible power of truth. It may be temporarily overshadowed by falsehood, you may succeed in filling the people's eyes with dust for a time, but after all the immortal saying of the immortal Lincoln about fooling the people remains an eternal verity.

When we have the temerity to state that some of the pharmacopeial and most of the National Formulary preparations intended as *substitutes* for well-known standard remedies are not "just as good" as the originals, that in fact some of these imitations are nasty, ill-tasting and ill-smelling concoctions (and that it is therefore wicked to mislead the physician and the pharmacist—the former to prescribe and the latter to dispense these substitutes), we are accused by some narrow-minded druggists, and some misguided or ignorant doctors, of bias. To assure our accusers that we are as free from bias as any living human can be and, that our only misfortune is, that we have a penchant for telling the truth, regardless of consequences, would be a waste of time. Let us therefore see what pharmacists themselves—and real pharmacists with laboratory facilities—have to say about some of the National Formulary preparations.

Prof. W. H. Harrison, of the Northwestern University School of Pharmacy, Chicago, read a paper before the Chicago Branch of the American Pharmaceutical Association entitled "Notes on Proteid Iron Solutions." The paper appears in *The American Journal of Pharmacy* for April, and we advise every honest physician and pharmacist to read it there in its entirety. An abstract of it also appears in the A. Ph. A. Bulletin for May. Dr. Harrison considers the three proteid iron preparations of the National Formulary: *Liquor Ferri Peptonati*, *Liquor Ferri Peptonati cum Mangano*, and *Liquor Ferri Albuminati*. Of the first Dr. Harrison has the following to say:

LIQUOR FERRI PEPTONATI.

"The present National Formulary formula yields a product which is a thick red-brown liquid, with a very *disagreeable glucy*¹ odor. It is clear in neither reflected nor transmitted light, and of such a colloidal nature as to render filtration impossible even under greatly increased pressure. The taste is at first pleasant, followed by a strongly *alkaline* and *ferruginous* aftertaste, which persists."

He then proceeds to show the reasons why a good preparation is impossible. The chief trouble lies in the peptone, of which it is impossible to obtain in the open market satisfactory or uniform specimens. Whether obtained from meat or fish albumin they "are prone to *rapid putrefaction* and yield iron combinations of most *offensive* odors."

Of *Liquor Ferri Peptonati cum Mangano*, which is openly and frankly intended as a substitute for *Pepto-Mangan Gude*, and on which substitute an immense amount of time and labor has been expended, the author has the following to say:

LIQUOR FERRI PEPTONATI CUM MANGANO.

"When made according to the present formula, with the materials obtainable on the market, the National Formulary preparation may be described thus:

"A dark brown *sluggish* liquid, with a most *offensive* odor, not unlike a mixture of *ammonia* and *putrefied beef extract*. Taste *alkaline*, *saline* and *nauseating*. It deposits after a time a *dirty white sediment*, which soon covers the bottom of the vessel.

"The finished product contains about .15 per cent. iron, .145 per cent. or less manganese, and .234 per cent. ammonium hydroxide, the latter serving the *sole purpose* of developing more *offensive* odors.

"I have prepared four samples, in each case using different samples of peptonised iron, the finished products being almost identical.

1. Italics ours throughout.—Ed. C. and G.

"The trouble with this preparation lies principally with the peptonised iron, and ammonium hydroxide, although there is room for improvement elsewhere.

"Of six samples of peptonised iron examined, the products of the principal manufacturers of pharmaceutical chemicals, *all* showed that *putrefaction* was in progress¹. Of seven examined for iron content, only one showed over 5 per cent. Fe O (3.5 per cent. Fe), and this one sample has not yet been on the market under the name of peptonised iron or iron peptonate.

"At the time this work was started, but two samples of iron peptonate and none of the soluble manganese citrate were obtainable on the Chicago market.

"After some time I succeeded in collecting some direct from the manufacturers, seven samples of peptonised iron and two of soluble manganese citrate.

"These two samples of soluble manganese citrate, although bearing the same title, are *entirely different substances*.

"(1) A light red-brown powder with a strong odor of acetamide and ammonia. It is a manganese-ammonium citrate containing about 18 per cent. manganese. Incompletely soluble in water, but solution is rendered clear by standing for some time with a slight excess of ammonia.

"(2) Pearl-colored scales (evidently made after the formula of F. B. Power, Proceedings A. Ph. A., 1902, 937). Contains 13.5 per cent. manganese. It is a manganese sodium citrate freely water-soluble.

"In view of the above facts, it seems that a satisfactory preparation according to the present N. F. formula is *impossible*, although with a good sample of peptonised iron it could yield a *passable one*."

Now, gentlemen of the medical and pharmaceutical professions, please read the above carefully, very carefully. Here we have a preparation of great, thoroughly established, therapeutic value. That it is of great, thoroughly established, therapeutic value is seen from the fact that it is prescribed by physicians universally throughout the country. That it is prescribed universally is seen from the fact that every manufacturer, big or little, and every would-be pharmaceutical chemist is racking his brains and spending his time and labor in his endeavor to prepare a successful substitute for Dr. Gude's pepto-mangan. And what

1. Dr. Harrison is not alone in his opinion. All pharmacists who investigated the matter think the same. Mr. M. I. Wilbert, one of our foremost pharmacists, and a member of the Council of Pharmacy and Chemistry of the American Medical Association, says: "This formula (for *Liquor Ferri Peptonati cum mangano*) directs that commercial ferric peptonate be used. This substance *at best is variable, is unstable*, and, as *usually met with, is decomposed and unfit for use*. Commercial manganese peptonate, suggested in the alternative formula, is *even more unsatisfactory than the ferric peptonate*." (*American Jour. of Pharmacy*, May, 1907, p. 211.)

is the result? What have we got? After hundreds and hundreds of attempts, after many years of labor, the leaders of pharmacy give us in the *third* edition of their book as a substitute for a well-known ferruginous tonic a formula, which yields in the hands of the *best* pharmacists a preparation of "a most *offensive* odor, *not unlike a mixture of ammonia and putrefied beef extract*. Taste *alkaline, saline, and nauseating*, and depositing after a time a *dirty white sediment!*"

Is this the aim of real professional pharmacy?

And I appeal to you all to answer this question: If you had a boy or girl, wife or mother who was very anemic and was in need of a mild, assimilable, non-irritating ferruginous tonic, would you give the original pleasant-to-eye, smell and taste—and stable pepto-mangan, or would you give the National Formulary Liquor Ferri Peptonati cum Mangano, which is physically, pharmaceutically and therapeutically *rotten* (there is no other term possible), which according to the testimony of pharmacists themselves has a *most* offensive odor, alkaline, saline and nauseating taste and becomes very quickly decomposed? Would you run the risk of ruining their stomach and making them still sicker, because the imitation product may perhaps cost ten cents cheaper? And if you would not, if in your own family you would use the genuine product, why should you treat the outside public so badly?

Dr. Harrison claims that after numerous trials he has succeeded in preparing a satisfactory solution of iron peptonate with manganese. He gives an exceedingly elaborate formula and process. Assuming this to be the case, does any one believe that one druggist in a thousand would go to all these pains to select materials of the highest quality? And does any one believe that one druggist in a thousand would succeed in making a satisfactory preparation by following Dr. Harrison's elaborate directions which it took him months to perfect? And what is it all for? And this leads us to the important question:

WHAT IS IT ALL FOR?

Who inoculated us with this crazy substitution-mania? What obsession has taken possession of us, that no sooner has a preparation become popular no sooner as a real demand been created for it, than pharmaceutical professors and sub-professors, their assistants and sub-assistants, our manufacturers and their employes anxious for a raise, and, what is worse, our National Formula makers, begin to spend time, labor and material, in order to prepare a more or less satisfactory (?) *substitute!* As a result of this we get a hundred different imitations, all varying in color, odor, taste, chemical composition and thera-

peutic action, and many of them positively rank, irritating and injurious. And this is called the elevation of pharmacy and therapeutics! It is not thus in Europe. We do not hear of the English, German, French or Italian professors and pharmacopeia makers spending their time and labor in the attempted manufacture of imitations of well-known products. They spend their time and labor in *original research and investigation!*

The imitations, we said, all differ widely in character and not one of them is as good as the original. The reasons are easy to understand. The manufacturer of one or only a few specialties devotes his entire time, energy and capital to those specialties. He makes numerous experiments; he uses materials of the highest obtainable quality; he invents or instals special machinery, if necessary. All these things are entirely out of the question with the retail druggist, and even with the big general pharmaceutical manufacturer; for making several hundred to several thousand different preparations, it is impossible for him—it *does not pay him*—to devote too much time, labor and expense to an imitation of somebody else's specialty—especially as he has no reputation to gain or lose on it. Yes, the reasons are perfectly plain, why the imitations are never as good as the really worthy original additions to our therapeutic armamentarium. But while I knew a priori that this was so, I wanted to convince myself by concrete examples, by incontrovertible facts. I secured samples of practically *every* preparation which our noble pharmaceutical leaders have introduced into our Pharmacopeia and National Formulary as substitutes for well-known proprietary products. I secured samples of the "official imitations" of arsenauro, anti-phlogistine, aristol, lysol, pepto-mangan, Gray's glycerine tonic, Gardner's hydriodic acid, Fairchild's essence of pepsin, Carlsbad salts, glyco-thymoline, listerine, even of such a simple thing as resinol, and *not in one instance* was the imitation equal to the original in purity, taste, homogeneousness, stability, etc. Some of the preparations were absolutely rank, disgusting, and I could but feel contempt, mixed with indignation, against certain high moguls of pharmacy, who mislead the poor retail druggist and the unsophisticated physician into the belief, that their careless, imperfect, theoretical, extemporaneous formulae will yield products "just as good" as the standard products, which are the result, perhaps, of many years of chemical or pharmaceutical research and which are prepared in specially adapted laboratories with the utmost care.

We will now pursue another line of thought. Let us assume for a moment that after the expenditure of a lot of time and labor somebody has succeeded in preparing an imitation of some well established proprietary, which is *absolutely* "just as good"—

absolutely the same—pharmaceutically, chemically and therapeutically. Let us assume it. What has been accomplished? What has been added to pharmacy and chemistry? Nothing! Not an iota. Merely a product that has already been in existence and in use, has been duplicated by somebody else. But here somebody will be sure to interject: Why, the product has been cheapened. A product that can be manufactured by everybody is generally cheaper than a monopoly product. But to whom is the product cheaper? To the public? Any such assertion would be emphatically untrue. Just prescribe 12 ozs. or a pint of the imitations, let us say, of *Liq. ferri peptonati cum mangano* or *Elix. gentian. glycerinat.* and see how much a druggist will charge. As a matter of fact I have been told and know personally of instances where my good friends, the druggists, make it a rule to charge *more* for the N. F. preparations than for the original products. Incredible? Just try it yourself. Do you want additional testimony from an unimpeachable source? Take *The American Journal of Pharmacy* for May 1907, and open it to page 236. On that page you will read the following:

“Professor Remington, in the course of his remarks, strongly deprecated the reported tendency of pharmacists to *charge more* for U. S. and N. F. preparations than for corresponding proprietary preparations, and expressed the belief that practices of this kind would surely do much to discredit the propaganda and do an infinite amount of harm.”

It is thus *seen*—and seen in a manner which cannot be gainsaid—that the public is not at all benefited by this U. S. P.—N. F. propaganda. Who then is benefited? The druggist? Yes, that I admit. The druggist is to a certain extent benefited by this propaganda. And nobody begrudges it to him. Eking out as he does a very poor living after working longer hours than any other tradesman or professional man, nobody, I am sure, will grudge the druggist a few extra cents profit (*provided* the imitation products are really in every respect as good as the original ones). But this being so, that is the manufacture of imitation products *not* tending to the elevation of pharmacy and chemistry and *not* being of the slightest benefit to the public, let us say so! Let us have a clear understanding as to what all this propaganda is about. Let us stop talking about the elevation of professional pharmacy, let us stop throwing dust into the eyes of the unsophisticated physician, and let us acknowledge openly and honestly that the entire N. F. propaganda is a movement instituted for the purpose of affording the druggist a larger profit on physicians' prescriptions and—if it must be said—of making substitution respectable, of giving it, so to say, an official status. Is

this putting it too strong? But it is the truth, and the language of truth, said the Romans, is simple; simple, plain and direct.

A WARNING.

And here I wish to utter a word of friendly warning to the pharmacists of this country, which warning I trust will be heeded by the readers of the *Critic and Guide*. Suppose the N. F. propaganda is successful and the doctors begin to prescribe N. F. preparations instead of standard long-established products. Then the druggist must be *sure*—and this is my warning—that the preparations he dispenses are really of high merit physically (taste, odor, etc.), pharmaceutically and therapeutically. Otherwise, he will only hurt himself, the thing will act as a boomerang; the doctor's confidence in the retail druggist's ability will be shaken still further, and he will be still further strengthened in his belief that the safest thing is to prescribe brand preparations of known composition—or he will be driven into self-dispensing. Here are two actual experiences—two out of many that I could relate. A physician was in the habit of prescribing large quantities of Hayden's Viburnum Comp. The druggist to whom most of the prescriptions used to go thought it wise to do some missionary work with the doctor, showing him circulars about nostrums, etc., and urged him to prescribe the N. F. substitute for H. V. C., which he claimed was superior. The doctor finally, half persuaded, wrote a prescription for Viburnum compound N. F. The druggist prepared it extemporaneously and dispensed it. The woman complained to the doctor that the medicine did not taste like the other times, made her sick at the stomach and didn't do her any good. The doctor, as he told me, then sent the N. F. to —, continued to prescribe as formerly and the missionary druggist is now getting fewer prescriptions from him than formerly. The second case is one in which a druggist dispensed a muddy ill-smelling, strongly alkaline mixture instead of peptomangan which the doctor had prescribed, and as a result lost almost his entire prescription trade; for the doctor was one of those who looked at the substitution business very seriously and took pains to tell the members of his medical society that the druggist O. was a substitutor.

Yes, make sure, when you do create a demand for U. S. P. and N. F. preparations, that you are able to supply the demand. For it is a well-known fact that *not* 5 per cent. of the druggists in the country are capable of preparing even the half-way complex preparations of the U. S. P. and N. F. (such as the organic iron preparations, effervescent salts, etc.).

We are not alone in our opinion that the N. F. propaganda is not the best thing in the world. Some prominent *pharmacists*

think the same way. Take *The American Journal of Pharmacy* (June, 1907). On page 296 you will find a report of a paper entitled "Practical Results with N. F. Preparations" read before the Philadelphia College of Pharmacy. In discussing that paper, a prominent pharmacist, Mr. D. J. Thomas, "was inclined to question the advisability of pursuing this line of work at the present time, thinking that *the rank and file of pharmacists were not prepared to meet the demand* for U. S. P. and N. F. preparations. He recounted some experiences that had come to his attention that appeared to indicate that pharmacists in his locality, like pharmacists in other sections, had been remiss in their duty to themselves and their customers, and had not kept themselves posted on the progress of pharmacy along the more practical lines. He also called attention to several formulas that *when followed exactly did not give satisfactory preparations*. Among these he enumerated the glycerinated elixir of gentian and the cataplasm of kaolin."

This editorial could be drawn out so as to occupy an entire issue—for numerous facts and illustrations could be offered as proofs in support of our position—but we believe we have said enough to show the tenability, the validity of our reasons, the impregnability of our position, to any fairminded person, to any person who really wants to know the truth.

And now for a brief resumé of the conclusions based upon the facts and arguments presented in our editorial. The conclusions are as follows:

1. The products introduced into the Pharmacopeia and National Formulary as substitutes for other well-established products are inferior, in practically every instance, to the originals, while some of the formulas yield nasty, irritating, nauseating and therefore therapeutically worthless products.

2. To urge the physician to prescribe these imitations *in lieu* of the original products, is therefore dishonest. The physician *is not in any way* benefited, while the patient is distinctly injured.

3. This so-called National Formulary Propaganda has nothing to do with ethics. Instead of elevating, it tends, as we have shown, to degrade both pharmacy and medicine. It is purely a money-making proposition.

4. The public is not in any way benefited by this propaganda, for the patient has to pay just as much (and often more), for the *inferior* substitute as for the *superior* original.

5. The deduction which logically and inevitably follows from the above conclusions is this: If you know the composition of a product and that product has given you satisfactory results in your practice, stick to that product; prescribe it and see that

you get it; and do not allow yourself by specious reasoning and false claims to be persuaded to use an imitation or a substitute. *be that imitation or substitute official or non-official.*

Diri.

SOCIETY PROCEEDINGS.

Medical Society of the County of Erie.

REPORTED BY FRANKLIN C. GRAM, M. D., Secretary.

THE regular quarterly meeting of the Medical Society of the County of Erie was held at 4 p. m., June 15, 1908, in the rooms of the Society of Natural Sciences, Buffalo Library Building, the president Dr. Edward Clark, being in the chair.

The secretary read the minutes of the quarterly meeting held April 20, 1908, which were received. The amendments to the by-laws which were offered at that meeting were then considered seriatim.

Amendment No. 2 was changed to read "when at least twenty members are present." The other by-laws were each adopted as read. On motion of Dr. Wall, all the minutes and the proposed by-laws were then approved and adopted.

The secretary then read the minutes of the meeting of the Council held June 10, 1908, all of which were approved as read.

The secretary read the resignation of Dr. Harriet E. Sheldon, which was accepted.

In compliance with the direction of the council, the treasurer, Dr. Lytle, then read the names of all those who were in arrears. All were suspended by action of the by-laws. The treasurer explained the careful manner in which he had dealt with each individual before referring them to the council which again considered each name before it was placed on this list.

On motion of Dr. Wall, the names of all those who were read and the entire subject matter of suspension and reinstatement was referred to the council with power. The treasurer then read the names of those who had not paid their dues up to May 1, 1908.

Dr. T. H. McKee, Chairman of the Committee on Membership, then read the list of applicants and recommended their election as members of this society. Each name was considered individually and all were elected.

The names of those elected are as follows:

Henry J. Siedler, 1312 Fillmore Ave., Buffalo; David Cohn, 141 N. Division Street, Buffalo; Floyd Richardson, East Aurora; Albert W. Phelps, East Aurora; Anna M. Reinstein, 521 Broadway, Buffalo; Descum C. McKenney, 1250 Main Street, Buffalo; Harry A. Wood, 2200 Main Street, Buffalo; James A. Gardner,

403 Franklin Street, Buffalo; Frank M. Sweetland, Angola; Richard Hirsch, 1555 Genesee Street, Buffalo; George B. Dandy, 232 Norwood Avenue, Buffalo; Albert E. Persons, 27 W. Tupper Street, Buffalo; John C. Kamp, 1019 Grant Street, Buffalo.

The censors, through Dr. Grant, reported progress.

By special action taken at the annual meeting, the nominations for 1909 were directed to be made at this meeting. The president called for nominations for each of the offices to be filled, with the following result:

For president, Charles A. Wall; for first vice-president, Grover W. Wende; for second vice-president, Bernard Cohen; for secretary, Franklin C. Gram; for treasurer, Albert T. Lytle; for censors, Henry R. Hopkins, chairman, and the following members: DeLancey Rochester, Francis E. Fronczak, Walter D. Greene and John H. Grant.

For chairman of committee on legislation—F. Park Lewis; for chairman of committee on public health—Ernest Wende; for chairman of committee on membership—Thomas H. McKee; for delegates to the Medical Society of the State of New York for two years—Charles A. Wall, Arthur G. Bennett, Eli H. Long, Edward Clark, John H. Grant, J. D. Bonnar, Bernard Cohen, J. F. Rice and T. H. McKee.

For delegates to the Eighth District Branch,—James Stoddart, J. D. Bonnar, Albert T. Lytle, William H. Thornton, J. W. Grosvenor, Edward Blaauw, William C. Krauss, Edward Clark, B. P. Hoyer, Frank M. Sweetland, H. G. Hopkins, William Irving Thornton, Bentley S. Bourne, F. H. Stanbro and Albert W. Phelps.

Dr. F. Park Lewis then offered the following preamble and resolutions:

"WHEREAS, Ophthalmia Neonatorum, which is well-known as a preventable and controllable infection of the eyes, is still producing a large amount of blindness, notwithstanding the greater care exercised by individual obstetricians, and

WHEREAS, The American Medical Association has recommended that an organized movement be conducted throughout the various state and county medical societies for the prevention and control of this disease,

Resolved, That the Medical Society of the County of Erie approves the efforts that are being made in this direction, and

Resolved, That a committee, one member of which shall be the Health Physician of the city, be appointed by the president of this society, and whose duty shall be to put the recommendations of the Committee on Ophthalmia Neonatorum of the American Medical Association into effect in the County of Erie as far as may seem to be practicable."

Dr. Wall moved that the resolutions be so amended as to make

this committee consist of Dr. F. Park Lewis as chairman, with the Health Commissioner of this city, and one other member and whom they shall recommend to the council. Dr. Lewis accepted the amendment and the motion, as amended, was then adopted.

The president stated that formerly, when a member died, special meetings of the society would be called to take appropriate action. Since the society had become so large, this custom had fallen somewhat into disuse. He, therefore, with the consent of the society, appointed a committee on necrology whose duties it should be to prepare suitable resolutions upon the death of all members who died during the year, and present them to the society at the annual meeting. He named, as such committee, Dr. J. W. Grosvenor, Dr. DeLancey Rochester and Dr. William T. Getman.

Dr. Bonnar stated that the question of quarantine in cases of contagious disease often became a hardship to the afflicted families, and thought the common council and the mayor should be memorialised on the matter and the question of providing suitable hospital accommodations by the city. He, therefore, offered the following resolution:

"That the Medical Society of the County of Erie memorialise the common council and the mayor on the necessity of providing a municipal hospital for contagious diseases."

Dr. Wall offered an amendment to the resolution empowering the president of this society to appoint a committee of fifteen to take up this matter with the common council and the mayor. The motion, as amended, was then adopted.

The president later appointed the following-named members of this committee: J. D. Bonnar, chairman, and Grover W. Wende, Charles A. Wall, F. C. Gram, Ernest Wende, A. H. Briggs, P. W. Van Peyma, W. D. Greene, H. R. Hopkins, H. G. Matzinger, F. E. Fronczak, W. C. Callahan, DeLancey Rochester, Charles G. Stockton and D. W. Sherman.

The scientific session was called to order by the president at 8.30 p.m., when five minute talks were given as follows:

H. C. Matzinger, "Mental Changes Associated with Prolonged Visceral Diseases;" Dewitt G. Wilcox, "Tubercular Peritonitis;" S. A. Dunham, "A Case of Paranoia;" Marshall Clinton, "Intestinal Obstruction;" F. Park Lewis, "Ophthalmia Neonatorum;" E. C. Mann, "The Laity and Disease;" J. A. Gardner, "A Plea for Support of the Buffalo Branch of the Society for Sanitary and Moral Prophylaxis."

At the conclusion of these talks, every subject presented was discussed. The president then thanked all those who had favored the society with these scientific talks, and the meeting adjourned.

Buffalo Academy of Medicine

Report of Milk Committee.

IN 1907, Dr. Allen A. Jones, President of the Buffalo Academy of Medicine, appointed a milk committee consisting of Drs. Snow, Sherman, Russell, Julius H. Potter and Schroeder.

This committee begs to report that there has recently arisen in American communities a keen and intelligent interest in the cleanliness and nutrient qualities of cow's milk. It is appreciated that the health of adults and especially of young children is much influenced by the purity of the milk supply and that serious illness and often death may be the result of taking infected milk. The principal dangers of bad or dirty milk are:

1. The spread of typhoid fever, scarlet fever, gastrointestinal disease, and the like.
2. The numerous cases of bovine tuberculosis among the cattle of Western New York.
3. The sale of milk deficient in solids and the use of preservatives and thickeners in milk and cream.

The supervision of the milk supply of New York is under the control of two official boards, namely, (1) the State Agricultural Board, which deals directly with the sanitary condition of the cattle, dairies and farms; (2) the Health Officers of the various cities and villages who watch the distribution of milk to the consumer.

The functions of the State Agricultural Board are as yet imperfectly developed. There is practically no inspection for bovine tuberculosis. The tuberculous cattle from the west whose sale is prohibited in New England or Europe are dumped into Western New York.

There should certainly be state legislation forbidding the importation into New York State of cattle untested for tuberculosis. Again, the dairy farms of the state should be frequently patrolled, the farmers should be instructed in cleanliness, in aerating and cooling the milk. The milk producer should be forbidden to sell milk when their families and employees are suffering from any communicable disease. No water from a polluted stream or well should be used about a dairy. In some of the cities of the state most scientific and progressive work is accomplished chiefly through frequent chemical and bacteriologic examination, by inspection of the dairy farms, and by admonishing and penalising a careless or dishonest farmer or milkman.

The Milk Committee of the Buffalo Academy of Medicine has conferred together and with the Health Commissioner, who have mutually agreed that the need of the community is a clean raw milk.

Immediate measures for the improvement of the milk supply of Buffalo as agreed by the health commissioner, Dr. Ernest Wende, and the committee are, (1) to keep the milk cool in summer by the use of refrigerator cars as is done in New York City. Dr. Wende is planning to confer with the railroad officials on this subject. If the corporations refuse to furnish refrigerator cars, to transport milk in hot weather, a statement of existing conditions and an appeal for relief should be made to the Public Service Commission; (2) to make very frequent examinations, say three hundred per month, of the milk, for bacteria, total solids and preservatives. Bacteriological examinations are already made. The health office has been granted three additional inspectors of food and drugs; one of these, a trained chemist, is to work exclusively with milk.

The frequent examinations of milk will give a true index to its quality and cleanliness and there will be no reason why the citizens cannot be served with a clean raw milk. It would be desirable to give the utmost publicity to the condition of the city milk. A dirty or dishonest farmer or dairyman should be punished by either forbidding him to sell his milk in the city for a limited time, or by revoking his license.

(Signed)

IRVING M. SNOW,
DEWITT H. SHERMAN,
J. H. POTTER,
N. G. RUSSELL,
L. SCHROETER.

ABSTRACT.

Excretion of Hexamethylenamin (Urotopin) in the Bile and Pancreatic Juice.

S. J. CROWE (*Johns Hopkins Hospital Bulletin*, April, 1908) from a priori considerations concluded that urotropin, introduced as a urinary antiseptic in 1894 by Nicolaier, should when given internally be excreted in the biliary passages and there develop an antiseptic action. He accordingly undertook animal experimentation in this direction, with the following results:

1. Administered by mouth, the remedy is rapidly absorbed and remains in the circulating blood for 24 hours. Apparently the maximum concentration in the blood is reached 5 to 8 hours after administration.
2. It is excreted in the bile, pancreatic juice, and directly through the wall of the gall-bladder in dogs.
3. It was found in the saliva and milk of dogs after intravenous injection of 1 gram.

In view of these experimental findings in animals, it was determined to make a bacteriological and chemical study of the bile obtained from patients with biliary fistula, before and after giving urotropin. In four cases in which gall-bladder operations were done at the Johns Hopkins the remedy was administered, immediately afterward, in large doses (60 to 75 grains daily). The material aspirated from the sinus before the administration of the drug contained large amounts of various bacteria; that aspirated from the sinus subsequent to the administration of the medicament was entirely free from bacteria, and chemical tests showed the presence of large quantities of urotropin or its decomposition product formaldehyde. In the case of the typhoid bacillus, the rapid disappearance of the organisms was especially evident.

In a case of acute gonorrheal arthritis the medicament was also given, and some hours later the joint was aspirated and pus withdrawn which, upon chemical test, showed the presence of hexamethylenamin in considerable amount. Cultures proved that the infecting organism was the gonococcus. The dose was raised to 80 grains a day, and four days later cultures from the joint showed a marked decrease in the number of organisms. A third aspiration showed that the coccus had completely disappeared. During this period the clinical condition of the joint improved markedly. The effusion and the acute tenderness rapidly disappeared, but there still remained some periarticular infiltration and limitation of motion. After getting 80 grains daily for 24 days, the patient developed painful and frequent micturition, which however immediately ceased on withdrawal of the drug.

From these clinical observations Crowe adds the following conclusions to those he drew from his animal experiments: the remedy has been demonstrated in the bile, cerebrospinal fluid, synovial fluid, pleural effusion and blood of man. When given in sufficiently large doses (75 grains per diem) it appears in the bile in quantities which suffice to exercise a decided bactericidal action.

The remedy is probably of efficiency in:

1. Acute infections of the gall-bladder.
2. Convalescence from typhoid fever, as a prophylactic of subsequent gallstone formation and to sterilise the gall-bladder and thus prevent the patient's becoming a chronic bacillus carrier.
3. Before gall-bladder operations, as a prophylactic.

Treatment of Bacteriuria by Internal Medication.

J. W. CHURCHMAN (*Johns Hopkins Hospital Reports*, Vol. 13, p. 139[207]), says his experience demonstrates that helmitol is not superior to urotropin in point of efficacy; in the cases in which

urotropin had not wholly freed the urine from bacteria, resort to helmitol also proved unavailing. Regarding the prevention of bacteriuria, Churchman says that in no cystoscopy done in the practice of Dr. Young, on patients whose urine was uninfected and who had received urotropin internally, did the subsequent examination of the urine by the centrifugalisation method reveal organisms. But in one case in which the patient had not received this prophylactic medication, an infection did develop. "Clinical evidence, apart from the corroborating evidence of experimental work, very strongly suggests the value of drugs internally for prophylaxis of bacteriuria: such use not only is indicated, but may confidently be expected to be efficacious."

Incipient bacteriuria without cystitis, as clinical evidence goes to show, can in the majority of cases be inhibited by internal medication. In exceptional instances the bacteriuria will persist despite treatment. In the majority of bacteriurias associated with cystitis, as clinical evidence goes to show, it is practically impossible to wholly remove the organisms which have gotten a sufficient hold on the bladder to produce cystitis. Pus may diminish in amount, the symptoms be relieved, and the urine cleared; but only occasionally will the infection completely disappear.

From a series of bacteriological experiments with the urines of patients who took urotropin, methylene blue or salol by mouth, Churchman concludes:

1. Administration of urotropin, methylene blue or salol renders the urine inhibitive of the growth of the staphylococcus pyogenes, streptococcus pyogenes, *B. typhosus*, *B. coli communis* and *B. proteus vulgaris*.
2. Urotropin and methylene blue are more markedly efficacious (inhibitive) than salol; the choice lies with the first.
3. These drugs effect inhibition of bacterial development rather than destruction of bacterial life. They render urine an uncongenial medium for growth, but not an environment necessitating death.
4. Their effect is weakest on the staphylococcus pyogenes and strongest on the *B. typhosus* and streptococcus pyogenes.

PROFESSOR CROSSEN in his *Diagnosis and Treatment of Diseases of Women* (Mosby Med. Book & Pub. Co., St. Louis, 1907) points out that when uterine suppositories are used, more will be accomplished by incorporating into them some penetrating antiseptic, such as collargol or Credé's ointment, than by the use of the surface antiseptics usually employed.

TOPICS OF PUBLIC INTEREST.

New York Police to Stop Noises.

General Bingham Instructs Men on Violation of City Ordinances.

COMMISSIONER Bingham has received daily a batch of mail in which citizens complain bitterly of the unnecessary noise made by vehicles, automobiles and boys playing and running through the streets with tin cans tied to strings. He issued July 18, 1908, a general order instructing the police to suppress all unnecessary noise and to arrest noise makers. The general order reads:

The police force of this city can put a stop to a large proportion of the unnecessary noises which torment the entire population. Not only is it a matter of health and happiness for all concerned that the people of New York should be disturbed at night as little as possible, but there are also thousands of night workers in the city who must sleep in the day time. It is a part of the duty of the police force on patrol, as the general protectors of the public, to see that unnecessary noise is suppressed. Generally speaking, a public nuisance is an act that annoys, injures or endangers the comfort, repose, health or safety of any considerable number of persons.

In cases in which the noises are a violation of the laws or ordinances, arrests will be made. The unnecessary use of horns, sirens, whistles or bells on automobiles or motorcycles is a public nuisance and a violation of Section 385 of the Penal Code. Hand organs in the Borough of Manhattan are allowed to play from 9 a. m. to 7 p. m. All rails, pillars and columns of iron and steel transported through the streets of the city, causing loud noises, is a violation of the ordinance. No person owning or having animals or birds making unnecessary noise is permitted to keep them. It is unfortunately true that the streets constitute the only playground for thousands of children throughout the greater city, but, even so, the exercise of a little common sense will enable the police to distinguish what is purely unnecessary noise.

The police are directed to suppress the shouting of street hawkers of all kinds; all unnecessary shouting and yelling; unnecessary blowing of steamboat or factory whistles; roller skating on the streets or sidewalks to the interruption and interference of traffic; whistling peanut roasters; unnecessary blowing of whistles or horns on motorcycles or automobiles; letting the exhaust escape from motorcycles and automobiles without being properly muffled; blowing horns or bugles or ringing bells by scissors grinders; yelling of the "old clothes" man; yelling of "extras" at night; kicking tin cans on sidewalks; yelling of carriage barkers at theatres and hotels; flat wheels on streetcars; barking dogs; see owners of such dogs and report for action by the Board of Health; commanding officers will instruct each mem-

ber of their command to see that all ordinances and laws regarding unnecessary noises, both on land and water, are rigidly enforced, and it is made a duty of the precinct captains to inform themselves of the laws and ordinances on the subject of noise and instruct their men.

The police on duty along the river front will report the names of boats, time and places at which unnecessary whistling is done, and get the names and addresses of witnesses for report to the Police Commissioner.

The police are often unjustly criticised, but if, by a display of common sense and judicious energy, they effect any appreciable reduction in unnecessary noise, they will not only deserve but have the thanks and support of the entire community.

CORRESPONDENCE

Researches Concerning Compensatory Diarrhea.

Dr. George N. Jack Discusses a Paper with this Title Read at the Chicago Meeting of the A. M. A., by Dr. Heinrich Stern.

Editor Buffalo Medical Journal.

SIR: As other medical journals are publishing discussions and abstracts of papers that were read at the A. M. A. meeting, I thought it would not be out of place for you to publish my discussion of Dr. H. Stern's paper, since your JOURNAL has published so many of my papers, your readers naturally would be interested in this discussion.

I enclose discussion for your kind consideration.

G. N. JACK.

Buffalo, June 17, 1908.

The Chicago A. M. A. meeting brought out its usual grist of papers and discussions, all of which lend their mite toward the solution of the unsolved problems of life.

Some very interesting discussions were brought out, not the least of which was Dr. George N. Jack's discussion of Dr. Heinrich Stern's paper on "Researches Concerning Compensatory diarrhea."

DISCUSSION.

Dr. Jack, Buffalo.—I was much interested in Dr. Stern's paper. I have, as you all have, often seen eczema, sick headache and certain forms of asthma alternate with diarrhea. Now why is this? I, while pursuing my investigation along a certain special line have tumbled, as a result of operations, experiments on dogs, cadavers, etc., upon a few physiological respiratory laws that,

while they are not in accord with authoritatively established opinions, they, to my mind, very satisfactorily explain the relationship between certain asthmas and a compensatory diarrhea, and if you wish I will give them to you:

1. Lung tissue has a glandular structure, and performs a glandular function, which therefore causes the lungs to actually constitute two large irregular lymphangio-pneumatic glands. In fact lung tissue is of a glandular nature and function serving the mortar like purpose of holding the air tubes, bloodvessels and lymphatics in close or functioning approximation.

2. The elasticity of the lungs is not so pronounced as it has been believed to be, neither does it constitute the expiratory force given it by existing authorities.

3. Lung tissue of itself, not including the elastic visceral pleura or capsule covering it, nor the numerous small bloodvessels, everywhere ramifying it, is a coarse, friable, granular non-elastic glandular like tissue of little resistance that easily pick to pieces, tears or pulls apart in irregular, rough, ragged chunks of all sizes and shapes. Lung tissue by itself, therefore is not elastic as it appears en masse.

4. The only elastic tissues that acts directly upon the lung substance is that of the visceral pleura, and the numerous small bloodvessels or capillaries that so abundantly ramify the lung.

5. The lung tissue itself is practically *passive* during both inspiration and expiration.

6. Owing to the vacuum like pull between the visceral and parietal pleuræ, the lungs are as it were glued to the thoracic walls, from which they cannot pull, and they are passively expanded and passively compressed by the action of these walls.

7. The lungs collapse much more readily and completely on puncturing the thoracic wall of the cadaver, than from the same procedure in the living subject owing to the *lack* of pulmonary or lung blood pressure in the cadaver.

8. The existence of the pulmonary or lung blood pressure in the living subject tends to render the lungs more or less erotic thus serving to prevent them from collapsing so readily and completely in the living subject as in the cadaver upon admitting atmospheric air between the visceral and parietal pleuræ.

9. The air cells, minus the numerous little bloodvessels in their walls, are not elastic, but they are very collapsible. The air cells do not contract to force out the inspired air, but they are made to partially collapse and thus caused to shove the inspired air out.

The normal expiratory partial collapse of the air cells in normal expiration is due to the pressure of the thoracic wall upon

the air cell, the recoil of the elastic visceral pleura or lung capsule, and air cell wall capillaries, and to the expiratory changes in the pulmonary blood pressure, said blood pressure exerting its influence through the dense capillary net-work of bloodvessels found upon the walls of the air cells.

Thus a high blood pressure retards the collapsibility of the air-cells and favors expiratory dyspnea, which physiologically generally furnishes the last straw in the production of the prolonged expiratory wheeze of the air tube plugged asthmatic, and hence the immediate relief in certain asthmas following nausea, chloroform, the nitrites, altitude, or other agents which tend to reduce the pulmonary blood pressure. And on the other hand the death-like dyspnea in the asthmatic following the high blood pressure of exertion, alimentary intoxication, and the like.

The immediate relief from the dyspnea of certain forms of asthma and emphysema following perforation and entrance of air through the thoracic wall is due largely to its anti-blood aspirating effect and resulting pulmonary blood pressure changes.

Conclusions. The apparent elasticity of lung tissue is due to a blood pressure effect.

The *absence* of blood pressure permitting the lungs of the dead to collapse, from the atmospheric pressure in a manner resembling great elastic tension.

The *presence* of blood pressure in the dense capillary network of bloodvessels found upon and practically constituting, the thin walls of the air cells, is what gives to these coils of bloodvessels or air-cells an elastic effect in the lining functioning lung.

The general normal inspiratory rise of blood pressure tends to render the air-cell wall network coil of bloodvessels erotic, thus producing an opening effect on the air-cell which favors the entrance of air, while the normal expiratory reduction of blood pressure favors a softening of the tubular or vascular air-cell wall and thus favors the expiratory collapse of the bloodvessel walled air-cell.

Lung tissue then performs a glandular function while the air, air tubes, blood and bloodvessels do the respiration.

If these laws prove true, and if they are as I claim, founded upon unrecognised physiological laws that can be demonstrated by anatomical facts and laws of physics, they mean much to the future of medicine.

If in removing adenoids the mass is seized below and gradually stripped off from the mucous membrane, it can be more quickly and completely removed.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

All communications, whether of a literary or business nature, books for review and exchanges, should be addressed to the editor 238 DELAWARE AVE., BUFFALO, N. Y.

VOL. LXIV.

AUGUST, 1908.

No. 1

The International Congress on Tuberculosis.

THE most important meeting in the year insofar as it bears on the question of preventive medicine is the one given in the title of this article. It will be held in Washington beginning September 21, and continuing until October 12, 1908, thus covering a period of three weeks. We deem the congress of such great importance that we devote considerable editorial space to this notice, the material for which is furnished by the secretary-general, Dr. John S. Fulton, whose headquarters are in the Colorado Building at Washington.

One of its most important features is the fact that the President of the United States has accepted the presidency of the Congress. The President's letter to Dr. Lawrence F. Flick is so comprehensive, and withal so clearly conclusive as to the great work devolving upon this assemblage of scientific men, that we publish its full text.

THE WHITE HOUSE,

Washington, May 12, 1908.

SIR: It is with great pleasure that I accept the presidency of the International Congress on Tuberculosis which is to meet in this city on September 21, 1908, and extend its session to October 12, 1908. Official duties, however, may prevent my presiding at the initial meeting of the congress, in which case I will deputise secretary Cortelyou.

The importance of the crusade against tuberculosis, in the interest of which this congress convenes, cannot be overestimated when it is realised that tuberculosis costs our country two hundred thousand lives a year, and the entire world a million lives a year, besides constituting a most serious handicap to material progress, prosperity and happiness, and being an enormous expense to society, most often in those walks of life where the burden is least bearable.

Science has demonstrated that this disease can be stamped out, but the rapidity and completeness with which this can be accomplished depend upon the promptness with which the new doctrines about tuberculosis can be inculcated into the minds of the people and engrafted upon our customs, habits and laws. The presence in our midst of representatives of world-wide workers in this magnificent cause gives an unusual opportunity for accelerating the educational part of the program.

The modern crusade against tuberculosis brings hope and bright prospects of recovery to hundreds and thousands of victims of the disease, who under old teachings were abandoned to despair. The work of this congress will bring the results of the latest studies and investigations before the profession at large and place in the hands of our physicians all the newest and most approved methods of treating the disease,—a knowledge which will add many years of valuable life to our people and will thereby increase our public wealth and happiness.

The International Congress on Tuberculosis is in the interest of universal peace. By joining in such a warfare against a common foe the peoples of the world are brought closer together and made to better realise the brotherhood of man; for a united interest against a common foe fosters universal friendship. Our country, which is honored this year as the host of other nations in this great gathering of leaders and experts and as the custodian of the magnificent exhibit which will be set up by the entire world, should manifest its appreciation by giving the congress a setting worthy of the cause, of our guests, and of ourselves. We should endeavor to make it the greatest and the most fruitful congress which has yet been held, and I assure you of my interest and services to that end.

With expressions of appreciation for the compliment conferred in extending the invitation to become president of the congress.

Very respectfully,

THEODORE ROOSEVELT.

The congress meets once in three years and after 1908 will not meet in this country for many years to come. It, therefore, furnishes an opportunity for Americans to show what the western world can do in the way of a host, as well as what they can contribute to the scientific prevention of an infectious disease that has invaded every corner of the earth. Moreover, it will be a real world's congress in which delegates will discuss the tuberculosis problem for three weeks, the participants being some of the most eminent authorities on the subject.

The congress will be divided into seven sections, thus giving ample scope for the consideration of every phase of the problem, in which both scientific and lay members may participate. A tuberculosis exposition will furnish entertainment and instruction;

clinics and demonstrations will give object lessons to the delegates; and valuable publications will be issued, chiefest of which will be the transactions of four volumes, free to all members who pay the fee of five dollars. Associate members may pay a fee of two dollars, thus acquiring all the privileges of membership except the right to vote and to receive a copy of the transactions.

All persons who desire to become members should address Dr. John S. Fulton, secretary-general, 714 Colorado Building, Washington, D. C.

CALOX, the oxygen tooth powder, is commanding the attention of the general public, as well as of the profession. The chemistry of the dentifrice has the approval of experts, its composition is as near perfect as the chemical laboratory can make it, and altogether it is the most hygienic tooth powder with which we are familiar. Moreover, nothing can approach it as a cleanser of artificial dentures. The oxygen it contains does its work.

THE American navy has been given its woman nurse corps by act of the recent congress, but now Great Britain goes us one better by proposing for its army a mounted nurse corps. There is now in existence a company of young women which has been trained by a veteran officer and will be ready for the test. The Islington Drill Brigade Girls' yeomanry they are called, and now are twenty-five strong and efficient riders. The girls wear the ordinary military rank badges, surmounted by a spur and cross whips; one tunic blouse, with a blue skirt with white braiding round the bottom; white gauntlets, black leggins and a yellow sash. A red and blue field service cap is worn with a chin strap. Riding-whips are carried.

THE National Volunteer Emergency Service, instituted in 1900, has recently been reorganised by the election of Dr. James Evelyn Pilcher, the distinguished editor of *The Military Surgeon*, as its Director General, and Dr. F. Elbert Davis, of New York, as its Adjutant General. Its work will be conducted along military lines, the details being worked out in three separate Corps, a First Aid Corps, a Public Health Corps, and a Medical Corps—the latter consisting of physicians, with rank from Lieutenant to Colonel, according to length of service, to whom are afforded special opportunities for emergency training. It includes among its personnel a large number of notable personages, and is rapidly extending its membership throughout the country. Full details regarding the service and its great work may be obtained by addressing Director General Pilcher at Carlisle, Pa.

THE health authorities of Chicago, in common with those in many other cities, are waging a vigorous war on the house fly. Dr. W. A. Evans, health commissioner, thus characterises the insect: "He is the filthiest, most dangerous and most common of disease-spreading insects that infest these parts in summer. He is born in and lives on decaying vegetable and animal matter. He was a maggot before he was a fly. It is only natural that he should carry thousands of disease germs on his feet and deposit them in the food you eat. Doubtless much sickness and many deaths can be prevented by keeping the fly out."

PAPER milk cans are coming into use all over England. They are never used twice—hence hygienic. They are lighter—hence liked by those who handle them. They reduce the noise of the matutinal milk cart—hence weary victims of insomnia bless them.

THE University of Buffalo, through Vice-Chancellor Charles P. Norton, has closed a contract with the County of Erie for the transfer of land which has been the subject of negotiation for some months past. The plot includes about 104 acres known as the almshouse property and \$5,000 has already been paid by Vice-Chancellor Norton, as a part of the purchase money.

PERSONAL.

DR. CHARLES R. BORZILLERI, of Buffalo, has been appointed treasurer of the Republican League of Clubs of the State of New York, succeeding John J. McWilliams, resigned. Dr. Borzilleri is a leading Italian physician in Buffalo, a man of accomplishment, and has recently opened one of the finest private hospitals in this region,—the Columbus Hospital—noticed in the July issue of the JOURNAL.

DR. JOHN DUGAN, of Albion, has been appointed health physician of that village for a term of four years, succeeding Dr. Frank G. Sherwood. Dr. Dugan is a graduate of the University of Buffalo, medical department, class of 1896.

DR. J. E. WALKER, of Hornell, N. Y., has been spending some months visiting the larger hospitals of Europe and, also, in making a special study of the methods employed at Bad Nauheim in the treatment of diseases of the heart. Dr. Walker returned about the middle of July and has resumed his work as superintendent of the Steuben Sanitarium at Hornell.

DR. AUGUSTUS G. POHLMAN, of Bloomington, Ind., who has for some time been junior professor of anatomy at Indiana University, recently has been promoted to a full professorship in the same chair.

DR. JANE WALL CARROLL, of Buffalo, who received the degree of bachelor of laws from the University of Buffalo last year, was created master of laws at the June commencement this year.

DR. F. E. L. BRECHT, of Buffalo, who with Mrs. Brecht and Miss Brecht has been spending several months in Europe, recently returned and has resumed his professional practice.

DR. WALTER C. G. KIRCHNER, of Saint Louis, superintendent and surgeon in charge of the Saint Louis municipal hospital, recently paid a short visit to Buffalo. Dr. Kirchner is making a tour of some of the northern cities while enjoying a few weeks vacation.

DR. WILLIAM P. SPRATLING, superintendent of the Craig colony for epileptics at Sonycia, N. Y., has resigned to take effect next November. Dr. Spratling is to accept the chair of nervous diseases and physiology in the College of Physicians and Surgeons at Baltimore, and will move to that city next fall.

DR. GEORGE F. COTT, of Buffalo, accompanied by Mrs. Cott and their son DeLancey, sailed from Montreal, August 1, 1908, for a three months tour in Europe.

OBITUARY

DR. ORRIN I. HALL, of Zumbrota, Minn., died at his home in that city June 25, 1908, aged 66 years. He graduated in medicine at the University of Buffalo in 1873.

DR. LEWIS BARNES died of apoplexy at his home in Oxford, Conn., July 5, 1908, aged 84 years. He graduated from the medical department, University of Buffalo, in 1851.

DR. JAMES M. O'NEILL, of Buffalo, died at his home 381 Swan Street, July 15, 1908, aged 56 years. He was a native of Dublin, Ireland, and a graduate of Dublin University. He practised his profession in England for some years, but came to Buffalo about twenty-three years ago settling near the old Hydraulics, where he obtained prominence as a conscientious and skilful physician. He is survived by three daughters and four sons. Mrs. O'Neill died about three years ago.

DR. EDWARD H. BALLOU, of Gardenville, N. Y., died at his home in that village July 25, 1908, aged fifty-four years. He received his preliminary education at the Clarence Academy and graduated in medicine at the University of Buffalo in 1878. He almost immediately located at Gardenville and for twenty years served as health officer of the town of West Seneca. He was one of the founders of Gardenville high school and was president of the board of trustees from the beginning. He was a member of the Medical Society of the County of Erie, of which he was president a few years ago. Dr. Ballou is survived by his wife, (nee Bertha Hafner), two daughters, Bertha L. Ballou and Mrs. Alfred Frey, of Buffalo, and one son, Edward J. Ballou.

SOCIETY MEETINGS.

THE American Association of Obstetricians and Gynecologists will hold its twenty-first annual meeting at the Hotel Belvedere, Chase and Charles Streets, Baltimore, Md., Tuesday, Wednesday and Thursday, September 22, 23 and 24, 1908, under the presidency of Dr. E. Gustav Zinke, of Cincinnati. Drs. W. A. B. Sellman, Joseph H. Branham, and William S. Smith, of Baltimore, constitute the committee of arrangements.

The following is a list of papers offered up to July 25, 1908.

1. The president's address, The solving of the problem of obstetrics, E. Gustav Zinke, Cincinnati.
2. Pubiotomy on the non-pregnant woman; report of a case operated, John N. Bell, Detroit.
3. The technic of the operation for periappendiceal abscess, William A. B. Sellman, Baltimore.
4. The comparative merits of abdominal celiotomy and colpotomy in the treatment of intrapelvic abscess, William S. Smith, Baltimore.
5. Shock in obstetrical practice, Adam H. Wright, Toronto.
6. Fibroid tumor of the uterus resembling pregnancy, with exhibition of specimen, Raleigh R. Huggins, Pittsburg.
7. Report of a case of impossible labor from ovarian dermoid; Cesarean section; recovery. Induction of labor in the second confinement, Walter P. Manton, Detroit.
8. Ovarian cystomata complicating pregnancy, Charles G. Cumston, Boston.
9. Experiments upon animals relative to the question of abdominal supporters after laparotomy, Robert T. Morris, New York.
10. A short history of fibroid operations during pregnancy, J. H. Carstens, Detroit.

11. Subdiaphragmatic abscess with report of cases, John W. Keefe, Providence.

12. Specimen of uterus and appendages showing a recent curet perforation and the result of vaginal section for extrauterine pregnancy seven years before hysterectomy, Joseph H. Branham, Baltimore.

13. Intraligamentous fibroids, John F. Erdmann, New York.

14. Advanced ectopic gestation with living child, with report of three cases, X. O. Werder, Pittsburg.

15. Extrauterine pregnancy, H. E. Hayd, Buffalo.

16. Ectopic gestation, Charles L. Bonifield, Cincinnati.

17. Some old fallacies in retroversion surgery revived, Albert Goldspohn, Chicago.

18. Treatment of typhoid fever perforation, John D. S. Davis, Birmingham.

19. Placenta succenturiata, with report of two cases, Edward T. Abrams, Dollar Bay.

20. Repair rather than removal of the internal generative organs of women, J. Egerton Cannaday, Wheeling, W. Va.

21. Factors of safety in abdominal operations, based on operations, George W. Crile, Cleveland.

22. A simple, certain and universally applicable method of preventing the serious accident of leaving a sponge in the abdomen, H. S. Crossen, Saint Louis.

23. Acute pancreatitis, with report of case, Louis Frank, Louisville.

24. Postoperative hiccough, Edward T. Abrams, Dollar Bay.

25. Removal of fibroid tumor from the pregnant uterus, William J. Gillette, Toledo.

26. Disorders of the female bladder, Ramon Guiteras, New York.

27. My experience with the Gilliam operation, William H. Humiston, Cleveland.

28. Typhlitis, John A. Lyons, Chicago.

29. Remarks on myoma of the cervix uteri, with presentation of specimen, Francis Reder, Saint Louis.

30. Arteriosclerosis of the uterus, Charles M. Rees, Charleston.

31. Injuries to the bladder occurring during hernia operations, Roland E. Skeel, Cleveland.

32. Abscess of Gaertner's canal, with report of a case, Magnus A. Tate, Cincinnati.

33. Hysteria as the surgeon sees it, Ap. Morgan Vance, Louisville.

34. History and treatment of uterine fibroids, A. Vander Veer, Albany.

35. Fallacy of purgation, Edwin Walker, Evansville.

The following named Fellows have promised papers the titles of which have not been supplied as yet: John Young Brown, Saint Louis; Henry Schwarz, Saint Louis; Frederick Blume, Pittsburg; Walter B. Dorsett, Saint Louis; Thomas B. Eastman, Indianapolis; Carlton C. Frederick, Buffalo; H. S. Griffin, Hamilton, Ont.; W. D. Haggard, Nashville; Rufus B. Hall, Cincinnati; C. S. Hamilton, Columbus; H. W. Longyear, Detroit; L. C. Morris, Birmingham; John B. Murphy, Chicago; L. S. McMurtry, Louisville; H. O. Pantzer, Indianapolis; Joseph Price, Philadelphia; Charles A. L. Reed, Cincinnati; M. Rosenwasser, Cleveland; F. F. Simpson, Pittsburg; Sigmar Stark, Cincinnati; William H. Wenning, Cincinnati.

COLLEGE AND HOSPITAL NOTES.

THE College of Medicine, Syracuse University, announces the following faculty and curriculum changes: Frank P. Knowlton, A. M., M. D., associate professor of physiology, has been made Professor of Physiology. H. S. Steensland, B. S., M. D., associate professor of pathology and bacteriology, has been made Professor of Pathology and Bacteriology. H. D. Senior, M. B., F. R. C. S., associate professor of anatomy, has been made Professor of Anatomy. Ernest N. Pattee, M. S., professor of chemistry in the College of Liberal Arts, has been made a member of the faculty of the College of Medicine. Richard H. Hutchings, M. D., Medical Superintendent Saint Lawrence State Hospital, Ogdensburg, N. Y., has been appointed Lecturer on Psychiatry. Ralph R. Fitch, M. D., of Rochester, N. Y. has been appointed Lecturer on Orthopedics. Charles V. Morrill, A. M., recently assistant in Zoölogy in Columbia University, New York, has been appointed Lecturer on Histology and Embryology.

Commencing in 1909, students entering the College of Medicine must have satisfactorily completed one full year, and on and after October, 1910, two full years in a science or arts course in a college recognised by the regents of the State of New York, and in that course and in their preparation for it a competent course in physics, chemistry, Latin, one modern language and biology must be included. The equivalent of this requirement, that is, evidence of having passed college examinations for admission to the sophomore or junior class is a recognised college by a student possessed of a medical student certificate from the State Educational Department, will be accepted. Hereafter all chemistry except applied chemistry will be taught in the new Bowne chemical laboratory of the College of Liberal Arts instead of in the College of Medicine as heretofore.

BOOKS AND AUTHORS.

The Blues (Splanchnic Neurasthenia). Causes and Cure. By **Albert Abrams**, A.M., M.D., (Heibelberg), F.R.M.S., Consulting Physician, Denver National Hospital for Consumptives. 12 mo, pp. 287. Illustrated. Third Edition. New York: E. B. Treat & Co. 1908. (Cloth, \$1.50.)

This book in two previous editions has received favorable mention in these columns. Under a new name, it deals with a form of neurasthenia, more or less common in these days of hurry and worry. The additions in this issue are a note on the vasomotor test in splanchnic neurasthenia in the appendix, and a chapter on intestinal autointoxication.

This is the right sort of book to read at odd times,—traveling, resting, or seeking repose between engagements. It is instructive and at the same time not overtaxing to the mental functions or powers.

A Textbook of Surgical Anatomy. By **William Francis Campbell**, M.D., Professor of Anatomy in the Long Island College Hospital. Octavo, pp. 675. Illustrated. Philadelphia and London: W. B. Saunders Co. 1908. (Cloth, \$5.00.)

Whoever would become a good surgeon must acquaint himself with anatomy in a most thorough manner. After acquiring a knowledge of general anatomy, the next important step is to study and specialise, by the application of this knowledge to clinical conditions to be met in the practice of surgery. This book is intended to aid in utilising the facts already established and to make them available in the operating room or at the bedside. Campbell has been known to the professional world for a long time as a capable teacher of anatomy, and it is fitting that he should undertake the preparation of such a work as this.

After a careful examination of the book, we are convinced of its great usefulness and consider it one of the best surgical anatomy's yet published. Especially would we invite attention to the illustrations as being unusually well adapted for instruction in this line. No surgeon, no one who has any just claim to the title of surgeon, will fail to add this book to his library.

Nervous and Mental Diseases. For Students and Practitioners. By **Charles S. Potts**, M.D., Professor of Neurology in the Medico-Chirurgical College of Philadelphia. Second edition. 12mo, 570 pages, with 133 engravings and 9 full-page plates. Lea & Febiger, Philadelphia and New York. (Cloth, \$2.50 net.)

To the student of medicine one of the difficult problems is to acquire the art of diagnosis in nervous diseases. This manual is an excellent aid to the solution of some of the most complex of these questions. Indeed, unless the undergraduate expects to become an expert in diseases of the nervous system, this book will

serve his purpose until he equips his library with one or more of the larger or more comprehensive treatises. The arrangement of subjects, the large faced type with which the paragraphs begin, the make-up, paper and binding all appeal to the eye of the expert as a splendid exhibition of excellent shop work. The scientific quality of the text is of the first order and embraces the important advances that have taken place since the first edition was put forth.

Bradycardia and Tachycardia. Part II. Disorders of Respiration and Circulation. By **Prof. Edmund Von Neusser**, Professor of the Second Medical Clinic, Vienna; Associate Editor of Nothnagel's Practice of Medicine. Translation by **Andrew MacFarlane, M.D.**, Professor of Medical Jurisprudence and Physical Diagnosis, Albany Medical College. 12 mo, 150 pages. New York: E. B. Treat & Co. 1908. (Cloth, \$1.25.)

Studies relating to the heart's action, and especially regarding the frequency of its beats, have been made with greater accuracy of late, due to increased laboratory opportunities in part and stimulated by the important bearing bradycardia and tachycardia have upon the clinical manifestations of disease. In this monograph are found the essentials of these two variations from the normal heart beat, as occurring in the more important diseases of respiration and circulation. An appendix contains a number of important references relating to the cause of the heart beat, to the Adams-Stokes symptom complex, and to the Adams-Stokes disease.

Mellin's Food Method of Percentage Feeding. 12 mo, pp. 183. Illustrated. Boston: Mellin's Food Co. 1908.

This is now the season when the summer diarrheas of infants are prevalent and when the utmost care in feeding must be exercised. Not only this, but the physician must possess rare skill and exercise the most perfect judgment in the management of children afflicted with these disorders. The Mellin's food method provides the ways and means for percentage feeding without the necessity of making calculations. The tables and formulas presented in this book are the result of more than four years of strenuous work in the laboratories of the Mellin's Food Company, involving some 3,400 fat analyses in which 1,700 quarts of milk were used. This enormous labor was performed under the personal direction of Edward E. Babb, Ph. G., a member of the American Chemical Society, and may be accepted as reliable in the most perfect sense of the word. The medical profession is greatly indebted to the Mellin's Food Company for working out these tables and formulas, and placing them in this convenient book form at the disposal of physicians. The Mellin's Food Company will appreciate correspondence from physicians relating to the method of percentage feeding as detailed in this book, as well as on the general subject of infant feeding with Mellin's food.

Progressive Medicine, Vol. X, June, 1908. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by **Hobart Amory Hare**, M.D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, 352 pages. Lea Brothers & Co: Philadelphia and New York. (Per annum in four cloth-bound volumes, \$9.00; in paper binding, \$6.00; carriage paid to any address.)

This number opens with a splendid article on hernia by Coley, which is well illustrated. The next topic is surgery of the abdomen in general exclusive of hernia, prepared by Foote. The third article is on gynecology by Clark; the fourth embraces diseases of the blood, diathetic and metabolic diseases; diseases of the spleen, thyroid gland, and lymphatic system by Stengel; and the fifth relates to ophthalmology and is prepared by Jackson. The volume is of excellent quality through and through and will add much to the reputation of this standard periodical.

A Manual of the Diseases of Infants and Children. By **John Ruhrah**, M.D., Clinical Professor of Diseases of Children in the College of Physicians and Surgeons, Baltimore. Second edition. 12mo, pp. 423. Philadelphia and London: W. B. Saunders Co. 1908. (Limp leather, \$2.00.)

This excellent manual has received the commendation of the JOURNAL in its previous editions. Some minor changes have been made, chiefly in the interest of accuracy. The new sections relate to the medical inspection of school children, the duration of the danger of contagion after infectious diseases, and on the return to school of children after exposure to contagious diseases. Also a short bibliography of the current pediatric literature has been added. In its present form it is to be adjudged as one of the better manuals for the medical student. Its value as an aid to the study of the diseases of children cannot be overestimated.

BOOKS RECEIVED.

Medical Gynecology. By **Samuel Wyllis Bandler**, M.D., Adjunct professor of diseases of women, New York Post-Graduate Medical School and Hospital; associate attending gynecologist to the Beth Israel Hospital, New York. Octavo, pp. 676. With original illustrations. Philadelphia and London: W. B. Saunders Co. 1908. (Cloth, \$5.00.)

The Natural History of Cancer, with special reference to its Causation and Prevention. By **W. Roger Williams**, Fellow of the Royal College of Surgeons. Octavo, pp. 519. Illustrated. New York: William Wood & Co. 1908. (Cloth, \$5.00.)

Contributions to the Science of Medicine and Surgery by the Faculty in Celebration of the Twenty-fifth Anniversary, 1882-1907, of the Founding of the New York Post-Graduate Medical School and Hospital.

Transactions of the American Association of Genitourinary Surgeons. Twenty-first annual meeting held at the Shoreham Hotel, Washington, D. C., May 7, and 8, 1907, and joint session with the American Gynecological Society at the George Washington University, May 9, 1907. Vol. 2. Edward L. Keyes, Jr., secretary. New York: The Grafton Press.

Borderland Studies. By George M. Gould, M.D., Author of a Series of Medical Dictionaries, etc. Vol. 2, 12 mo, pp. 311. Illustrated. Philadelphia: P. Blakiston's Son & Co.

Golden rules of Dietetics. By A. L. Benedict, A.M., M.D., Author of Practical Dietetics. 12 mo, pp. 407. St. Louis: C. V. Mosby Co. (Cloth, \$3.00.)

International Clinics. A Quarterly of Illustrated Clinical Lectures and especially prepared articles on Treatment, Medicine, Surgery, Neurology, Pediatrics, Obstetrics, Gynecology, Orthopedics, Pathology, Dermatology, Ophthalmology, Otology, Rhinology, Laryngology, Hygiene and other topics of interest to students and practitioners. Edited by W. T. Longcope, M.D., Volume II., eighteenth series. Philadelphia and London: J. B. Lippincott Co. 1908. (Cloth, \$2.00.)

The Baby. Its Care and Development. For the Use of Mothers. By Le Grand Kerr, M.D., Author of Diagnostics of the Diseases of Children. 12 mo. pp. 150. Illustrated. Brooklyn: Albert T. Hunt-ington. 1908. (Cloth, \$1.00.)

LITERARY NOTE.

LEA & FEBIGER, Publishers, Philadelphia, make announcement of a new edition of Gray's Anatomy. A thorough revision has been in progress for about two years and is so near completion that publication will be made during August.

Gray's Anatomy has maintained such a lead in its own field since its original publication fifty years ago that it has won the distinction of being the most important work in all medical literature. Hundreds of thousands of copies have started students at the beginning of their course in medicine, have been kept always at hand, and have been carried to their offices after graduation for guidance in the basic facts of medicine and surgery. Such an announcement as a new edition of "Gray" is therefore of primary importance to everyone concerned with medicine, whatever be his stage or station in medical life.

FOR RENT.—Two floors at 191 Delaware Avenue, Buffalo. Well adapted for physicians or dentists. Hot and cold water, bath, both gases. All modern conveniences. Immediate possession. \$75.00 for both floors. Apply to **Buffalo Medical Journal**, 238 Delaware Avenue.

BUFFALO MEDICAL JOURNAL.

VOL. LXIV.

SEPTEMBER, 1908.

No. 2

ORIGINAL COMMUNICATIONS.

The Surgical Treatment of Varicose Veins.

By CHARLES GREENE CUMSTON, M. D., Boston, Mass.

THE physician is very frequently consulted relative to a surgical operation for varicose veins and he frequently is at loss as to what advice he may properly give. The case may merely be one of capillary varices seated on the calves or on the thighs. This condition gives rise to itching, edema and cutaneous infections, and although quite uncomfortable, surgical treatment is not to be resorted to. Their dissemination, small size and site, having no well defined territory, is quite in opposition to an operative interference.

In cases of varix of large veins the question is quite different. One should distinguish between patients presenting this condition with a normal vascular tension and those having a high tension. In varices with a high tension, the blood pressure, which is variable according to whether the subject is standing or lying down, quiet or exerting violent muscular efforts, varies in the central end of the saphenous between two to twenty centimeters of mercury. In certain strong subjects the tension may be even greater than twenty-five centimeters.

This enormous exaggeration of the venous tension can only be produced on the condition that the twelve or fifteen valves seated inside the vein are forced and that the weight of the blood column falls directly back from the iliac veins and the vena cava toward the small venous trunks of the foot. Trendelenburg has shown how varices with high tension can be recognised. The patient being seated or lying down, the diseased leg is raised and the blood being pushed out of the varices gives rise to a complete collapse of the dilated vessels. If now one compresses the trunk of the saphenous with the finger and the patient is made to stand, the veins of the leg will not fill up, while the blood will rush from above as soon as the pressure is removed. In these cases resection of the vein will be useful, more frequently resection of the trunk of the internal saphenous, more infrequently that of a mass of dilated veins. The latter operation should be resorted to if this large mass becomes painful and increases in size.

The operation is not serious and can be done with local anesthesia. One should also resect any ampullar dilatation of the internal saphenous at its entrance into the fascia, a condition which has sometimes been mistaken for a femoral hernia. Simple ligature may sometimes be sufficient, but as it is not any more serious by far the surest method is to resect the vein between two ligatures. All this does not mean that varices of low tension are inoffensive, because phlebitis, disturbances in walking and edema may appear and recur with the greatest obstinacy; the repetition of these accidents will occasionally oblige one to operate, but generally speaking this is exceptional.

In spite of every effort recurrences may take place. Complications make their appearance, such as central or peripheral thrombosis and early or late embolus. The possibility of these complications have caused certain surgeons to abstain from operating, because they believe that an operation in no way changes the intimate causes of the phlebectasia and that the suppression of the superficial venous currents can only result in forcing the blood of the limb into the deep veins and thus increase their dilatation. It has also been upheld that when phlebitis appears spontaneously it is in itself a curative process. This, however, is not always the case, because the phlebitis is not necessarily of the obliterating type; consequently the blood current can become reëstablished and the patient still remains exposed to all the possible complications of a future attack. On the other hand if a patient operated upon is menaced with thrombosis or embolus, the one not operated upon is not immune from this possibility. And, lastly, the functional troubles are certainly more especially due to varices of the superficial veins than of the deep ones, on which the muscular contraction exercises such a favorable action. According to Chretien the indications for operation should not be limited to pain and hemorrhage. If, in the well-to-do class, rest in the horizontal position is possible the above two mentioned complications may perhaps be the only absolute indication for operating, but in the poor, who are obliged to earn their livelihood by daily effort, the question is entirely different. The edema, ulcers, trophic disturbances and difficulty in walking are all conditions which justify or necessitate surgical interference. In the army the same conditions are found. The signs of a valvular insufficiency, a localised phlebitic thrombosis, ampullar dilatations which greatly impede the patient on account of their seat and size, attacks of neuralgia due to compression of the nerve filaments, are all conditions which render the case fit for surgical interference.

An ulcer may create contraindications for operating in certain cases, when this process is of long standing, accompanied by

trophic disturbances in the skin and bone and has brought about atrophic sclerosis in the structures of the limb. Under these circumstances any operative interference will result in a complete failure, because the ulcer will promptly recur on a badly nourished limb, whose nerves are choked by a hyperproduction of connective tissue and infection becomes more menacing after an operation has been done. If, on the other hand, the ulcer is recent, if the varices have acquired a high tension within a short time, if the limb does not present any trophic disturbances, one will be in the right to interfere surgically. The operation, however, will be a delicate one, because an ulcer is a nest for bacteria and it is difficult to render the lesion sufficiently clean so that one can operate in its neighborhood with safety. For this reason it is better to wait and when the ulcer is of recent date cicatrisation may be obtained after a more or less long lapse of time by proper hygienic precautions and dressings. Medical treatment will result in the cure of the ulcer and if later the varix continues to be a hindrance, it will then be time enough to treat it by resection.

871 BEACON STREET.

Intestinal Obstruction.¹

By W. H. LOUGHHEAD, M. D., Andover, N. Y.

UNDER this term are included all those cases in which the contents of the intestinal canal are obstructed in their onward passage by causes or conditions arising within the abdomen or pelvis. Before a knowledge of pathology existed, the term was applied indiscriminately to all cases presenting the well marked indications of sufficient obstruction to the onward flow of the intestinal contents. Thus, with advancing pathological observations, definite classes have been made having a distinctive anatomical basis, and to which special designation have been given.

At the present day with a case before us in which we recognise the existence of an obstruction, we endeavor to go still further, to ascertain as far as possible, the location, the cause, and the nature of the trouble. To accomplish this in some cases is not difficult; in others it involves the highest knowledge and acumen, and in not a few is really impossible. A complete or partial occlusion of any portion of the intestinal canal may occur suddenly, causing acute obstruction; or be of gradual devel-

1. Read at a meeting of the Eighth District Branch of the Medical Society of the State of New York, held at Buffalo, September 25 and 26, 1908.

opment and thus reduce the diameter of the intestinal canal, causing chronic obstruction.

An acute obstruction may become chronic and a chronic case may become acute; therefore, it is sometimes difficult to determine accurately the condition with which we have to deal, as one form may take on some or many of the symptoms of the other. We do not purpose in this paper to discuss all the different classifications of intestinal obstruction but to call attention for a few moments to the report of a case which occurred at Andover, N. Y., in December, 1906.

I was called to the residence of Mr. R., December 19, about 2 p. m., to see his mother, she being a lady 65 years of age, the mother of four children, the oldest 43 years and the youngest 33 years. There was a negative family history. For some time she had been troubled with constipation, and at 4 o'clock in the morning she was suddenly attacked with severe abdominal pain which caused intense distress and continued. The pains were at first paroxysmal, and then after a time continuous, the suffering increasing as the case continued.

Nausea was followed by vomiting, which increased in severity until it constituted a most distressing symptom. The contents of the stomach were first voided; this was followed by a greenish fluid stained with bile, which became brown, and finally stercoraceous.

I gave her a hypodermic injection of heroin 1-12 gr. to relieve the pain. Saline and other cathartics, a high enema was also given to remove all fecal substance from the lower bowel, the entire colon being flushed, one gallon of water being used containing two ounces of magnesium sulphate, and one ounce of oleum terebinthiæ, but without results. The general symptoms indicated the grave character of the disease. The features were pinched, the surface cold and clammy, temperature being subnormal. The thirst was marked and the mouth and tongue were dry. The pulse was rapid, feeble, and at times irregular, the breathing being correspondingly more frequent.

There was suppression of urine. There was some tenderness upon pressure and a slight distention which involved the center of the abdomen rather than the sides. With the continued pain, subnormal temperature, rapid and feeble pulse, with early and continued vomiting, and obstinate constipation, I diagnosed an obstruction of the small intestines.

Intestinal obstruction is a surgical ailment and can only be adequately treated by surgical operation. The facilities for operating at the house were poor, hence the patient was placed upon a cot-bed and carried by train a distance of twenty miles to Saint James's Mercy Hospital, Hornell. Dr. Harvey P. Jack, of Canisteo, being informed by telephone that we desired an operation

was in readiness to proceed when we arrived at the hospital, about 3 p. m. on the following day.

The patient having been made ready he proceeded to operate. An incision was made in the middle line of the abdomen below the umbilicus about four inches in length, not allowing any intestine to escape. He examined first with two fingers, then with the whole hand the right iliac region, bringing into view a portion of the small intestine containing an oval solid mass, which completely impacted the lumen of the intestine. Carefully protecting the abdominal cavity by packing gauze about the opening, and making a longitudinal incision in the intestine, he removed the mass which proved to be an enterolith, and thus relieved the obstruction. He then closed the opening in the intestine by the Lembert suture, replacing the intestine within the abdomen. He then proceeded to close the abdominal incision with proper drainage and dressing. The patient made a quick and uninterrupted recovery and is enjoying good health at the present time.

If a patient has taken cathartics or injections without results, if he is vomiting, has paroxysmal pain, and the intestines knot up and show themselves in ridges against the abdominal wall, the chances are nineteen out of twenty that there is either a complete or partial obstruction. Thus partial obstruction soon develops into a complete obstruction, by reason of the infection at the point of obstruction. Hence a patient exhibiting this train of symptoms should be treated by the physician long enough only to satisfy himself that the bowels will not move.

That knowledge may be obtained in from six to twelve hours, and from that time on the attendant is blamed for every hour that is lost before operation. And that is the sole object of this paper, to bring the attendant physician to a realisation of the need of immediate action in that he permit no delay to bring harm to his patient, and that he make an early diagnosis of obstruction.

Staining of Tubercle Bacilli in Tissue Preserved in Alcohol for Sixty Years.

By A. A. THIBAudeau, M. B.,

Pathological Laboratory, University of Buffalo.

MOST observers believe that the bacillus of tuberculosis will retain its peculiar staining properties for a long time. A hasty review of some of the literature and more particularly of the various numbers of Baumgartens Jahresbericht has, however, failed to reveal any observations on the length of time that this organism will stain in the usual characteristic fashion in hardened tissues. On this account, some results obtained in the Pathological Laboratory of the University of Buffalo may be of interest.

The tissues were from specimens of tuberculosis of the lung donated to the pathological museum of the University of Buffalo by the late Austin Flint, then professor of the principles and practice of medicine, in 1848—just sixty years ago. During the past sixty years, these specimens have been preserved in alcohols of varying strengths. They include three specimens of acute tuberculosis with miliary tubercles and tuberculous pneumonia and one of chronic fibrous tuberculosis. Sections of these specimens showed the usual histology but they took the hematoxylin and eosin stain somewhat more feebly than would have been expected of ordinary, well preserved tissue.

Smears were made from suitable portions of all four specimens and stained with carbol-fuchsin for a few minutes using occasional steaming. In decolorising a weak solution (1|3 per cent.) of HC_1 in 70 per cent. alcohol was used. This rapidly removed the color from the smears, which were then washed in water and counterstained. By this method typical tubercle bacilli were demonstrated in the three cases of acute tuberculosis. None were found in the smears from the case of chronic fibrous tuberculosis.

Sections of tissue from these cases were also stained in carbol-fuchsin. It was found advisable to expose the sections for a long time to the action of the warmed stain. In decolorising the same weak solution (1|3 per cent.) of HC_1 in 70 per cent. alcohol was used very briefly. Sections were transferred from this solution to alcohol, cleared in xylol and mounted. By exercising some care in the staining and more particularly in decolorising, in the sections as in the smears, tubercle bacilli were demonstrated in the cases of acute tuberculosis, while they were not found in the case of the chronic fibrous tuberculosis. It is proper to add, however, that in many sections of the first three cases no tubercle bacilli at all could be demonstrated, while in other sections the bacilli were few in number and were feebly and irregularly stained. In only a few sections were fairly numerous and typically stained bacilli secured.

From these experiments in the staining of the bacillus of tuberculosis we can state that this organism, when present in tissues preserved in alcohol, may retain for a considerable time—in our case for sixty years—its peculiar staining properties. The staining properties of the bacillus appeared, however, to be somewhat impaired.

To prevent unsightly scars, incisions should be made on the slant rather than at right angles to the surface.—*International Jour. Surgery.*

Preventive Medicine at Panama

By SIR FREDERICK TREVES, Bt., G.C.V.O., C.B., LL.D.

[Proceedings Royal Society of Medicine, June, 1908.]

THE Isthmus of Panama is at this moment the scene of an enterprise in sanitation of surprising magnitude, an enterprise which serves to display the forces of Preventive Medicine on a scale never before paralleled.

I visited the isthmus in February of last year and had the advantage of seeing this remarkable work under the guidance of Colonel Gorgas, the chief sanitary officer. To Colonel Gorgas is due the credit of an undertaking which in its aims and its results is not one whit less astonishing than the work of connecting by means of a canal the two great oceans of the world. Colonel Gorgas is clearing of disease one of the most pestilential spots in the tropics, and is making of the same a place where men can live in safety and in reasonable health. He is at the same time demonstrating practically the soundness and efficiency of the most recent claims of Preventive Medicine.

The isthmus is situated near to the Equator, the city of Panama standing in about the latitude of 9° N. This part of the world, ever since its discovery by Columbus, has been more or less notorious for its unhealthiness. Enriquez de Guzman, who came here in 1534, says that of every 100 men who went to Peru by way of the isthmus eighty never returned. The mortality among the Spanish gold trains was known to be very high. Equally disastrous did the isthmus prove to the hordes of men who passed westward on their way to the goldfields of California. The number of laborers who died annually during the construction of the canal by the French company is not known, but the mortality was so high that on more than one occasion the work had almost to cease owing to the ravages of yellow fever. The deaths must have amounted to many thousands. So high was the death-rate among the laborers who constructed the Trans-Isthmian Railway that it has been said—probably with some truth—that every sleeper beneath the lines represents a human life. This railway was completed in 1855. The chief causes of the great mortality on the isthmus have been yellow fever, malaria and dysentery, with occasional outbreaks of smallpox. It may be called to mind that Sir Francis Drake contracted on the isthmus the dysentery of which he died, and that he lies buried just off the coast. It was on the isthmus also that his brother succumbed to yellow fever.

The isthmus, at its narrowest part, is about thirty-three miles in a direct line. The railway, which follows a winding course,

covers $47\frac{1}{2}$ miles from Colon to Panama. Along the isthmus and parallel to its shores runs a ridge of hills, the ultimate offshoot of the Andes. This line of high ground is nearer to the Pacific than to the Caribbean Sea, the Culebra Pass, through which the canal has to make its way, being some ten miles from Panama. The rainfall on the Pacific side is from 50 in. to 60 in. annually: while on the Atlantic side it ranges from 100 in. to 150 in. The mean temperature of the district may be taken as 82° F., the mean humidity as 88. The tide on the Pacific coast rises 14 ft., while on the Atlantic shore the rise is only 14 in. The country for the most part is covered by dense jungle, while the lowlands, especially on the northern side, are occupied by extensive swamps. The highlands present bare and open country with extensive tracts of prairie, grass downs and breezy slopes. The denseness of the forest tracts may be illustrated by the fact that Dampier when he crossed the isthmus in 1681, with Wafer, the surgeon, and forty-four pirates, only made on an average five miles a day. He attempted a wider part of the isthmus and followed a devious course, so that the traverse of 110 miles occupied twenty-three days. Major Ronald Ross, speaking of sanitation in Panama, says: "The country is one of the worst to deal with which I have ever seen."¹

The unhealthiness of the Panama area has been due, as has been already said, in the main to yellow fever and malaria. The actual mortality from these causes during the French occupation has never been published, but the fatality of these diseases can be to some extent gauged by the records of the British Army in the adjacent West Indies. Sir John Moore's garrison on St. Lucia amounted in June, 1796, to 4,000 men. By November the force had been reduced to 1,000 fit for duty and 1,500 sick. The campaign that lasted from 1793 to 1796 resulted, writes Fortescue, "in the total of 80,000 soldiers lost to the service, including 4,000 actually dead, the latter number exceeding the total losses of Wellington's army from death, discharges, desertions and all causes from the beginning to the end of the Peninsular War." The mortality was highest during the year 1794, when, of General Grey's original force of 7,000 men, no less than 5,000 perished during the course of the twelve months. It is probably beneath the mark, says Fortescue, that 12,000 Englishmen were buried in the West Indies during this single year. In 1780, four newly raised regiments were ordered to Jamaica. They stopped on the way at St. Lucia, where they contracted yellow fever. By the time the transports reached Kingston they had lost 168 men by death and had 780 on the sick list.

1. *Lancet*, 1907, ii., p. 886.

During the course of the first five months at Jamaica 1,100 more of the survivors had died of fever. It was then that Dalling, the Governor, placed the matter before the Secretary of State in the following words: "Considered only as *an article of commerce*, these 1,100 men have cost £22,000, a sum which, if laid out above ground, might have saved half their lives." In this sentence lies no little of the secret of the great success of the Americans in Panama. In addition to the dictates of humanity they have realised the part played by the laborer as an "article of commerce." The realisation of this fact by governments engaged in great enterprises of either war or peace comes, unfortunately, very late in the history of State-controlled sanitation.

The Isthmian Canal Commission was created in May, 1904. The commissioners found on the canal area a condition of chaos: the plant neglected, the district overgrown by tropical vegetation, little, if any, attempt at sanitation, and inadequate accommodation for the men employed. They found 3,000 laborers—mostly Jamaican negroes—still engaged on the works, and two French doctors, one at Panama and the other at Culebra. The Commission obtained from the Republic of Panama a grant in perpetuity of the land now known as the Canal Zone. This strip of land is ten miles wide—the line of the canal being in the center—and extends from sea to sea. Over the Canal Zone the United States have practically as complete control as if the territory were part of the home country, maintaining within its limits their own police and governing by their own laws. The grant included the group of islands in the Bay of Panama, but did not include the towns of Colon and Panama, although they are both on the canal strip. Colon, at the time of the occupation, had a population of 6,000 and Panama of 18,000. The position of these two towns, however, is defined in the following article. "The Republic of Panama agrees that the cities of Panama and Colon shall comply in perpetuity with the sanitary ordinances, whether of a preventive or curative character, prescribed by the United States, and in case the government of Panama is unable, or fails in its duty, to enforce this compliance of the cities of Panama and Colon with the sanitary ordinances of the United States, the Republic of Panama grants to the United States the right and authority to enforce the same." A like authority is granted to the United States to maintain public order in the two cities, should the Republic not be able, in the judgment of the United States, to maintain such order. The United States, moreover, obtained the power to drain these two cities, to provide them with a water supply, and to levy a water and sewage rate to defray the cost of the same.

It may be said that the sanitation of the two cities at the time

of the creation of the Commission was that of the Middle Ages. Water was obtained from rain-butts and shallow wells: there was no attempt at drainage, and the disposal of refuse was left to the individual householder.

The Commission realised immediately that if the canal was to be constructed, "thorough sanitation was the first essential." In every published report sanitary measures occupy the most prominent position. The medical officer of health was allowed absolute powers: he was assured (1905 Report) that "the entire resources of the Commission" were at his disposal, and funds were immediately forthcoming for all such undertakings as he considered necessary.

The views of the Commission on this question are expressed in the following words: "The importance of completing the sanitation of the Isthmus of Panama can hardly be exaggerated, for upon it depends not only the construction of the Isthmian Canal, but also the utility of the canal when completed, and the question as to whether the canal is to be a blessing or an affliction upon the inhabitants of the earth." It was realised that unless yellow fever was stamped out the canal would become the means of carrying that disease eastwards, since the lifetime of the stegomyia has been shown to be about three months.

Sanitary works were among the very first undertaken by the Commission, and Colonel Gorgas must allow that his department has received throughout the most liberal and sympathetic support of the Government.

In 1905 the number of men employed on the canal and railway was 19,500. In the sanitation section, nearly 2,000 men were exclusively engaged. The death-rate for the year was 24.3 per thousand. The number of the constantly sick, 30 per thousand, and the deaths from yellow fever, 47. In 1906, the deaths due to yellow fever fell to 7, and since that time the disease has disappeared. The mortality for the year 1906 was 17.5 per thousand among the whites and 53 per thousand among the blacks. In 1907 the number of employees was 29,446. The constantly sick were 29 per thousand. The death-rate among the white population had dropped to 15.9 per thousand and among the blacks to 45.3 per thousand.

The sanitary works commenced in 1904, and since then developed or completed, have been upon the following lines:

In the first place the housing of the employees was taken in hand. Excellent houses, barracks, boarding-houses and hotels were built along the canal tracks. The rooms are lofty, light and well ventilated, while all are screened with copper gauze. They are provided with modern sanitary conveniences, with a

good water supply and with modern plumbing. Better dwellings for a tropical climate with a heavy rainfall could hardly be designed. The feeding of the laborers has been a matter of especial care and of exceptional difficulty, on account of the fact that the bulk of the supplies have to come from the States. Numerous public kitchens and restaurants have been established where excellent food can be obtained at a minimum cost. As the West Indian negro is apt to feed himself meanly in order to save money, his wages are paid partly in board, so the security is obtained that he is amply fed. Previous to this arrangement many of the men almost starved themselves, and became thereby reduced in efficiency and in health. Ample holidays and rest days are instituted; reading rooms have been established along the zone, and clubs founded for every kind of recreation which is possible in a hot climate. A vessel is employed for free excursions to the island of Taboga, in the Bay of Panama, and every step is taken to keep the men upon whom the success of this great work depends in sound condition. One of the earliest matters undertaken was the providing of accommodation for the sick. The hospital at Ancon was greatly enlarged, and other hospitals built where required along the Canal Zone. The hospital at Ancon is a model building of its kind, replete with every modern appliance, and, indeed, as well equipped as any first-class European hospital. It is served by a specially selected staff, and in connection with the institution are ample laboratories for bacteriological and pathological work, for the chemical analysis of foods, and the like, and for general investigations in connection with the sanitation of the district. Looking back some ten years, it is scarcely to be believed that a body of engineers entrusted with the most stupendous construction of modern times should have recognised that among the *first* requirements to ensure success was a bacteriological laboratory. Colonel Gorgas, the chief sanitary officer, had further to secure proper hospital accommodation for the sick poor of the two cities, for the lepers, and for the insane. Such lepers as were unable to work lived in wretched hovels on the beach, where they existed in much the same way as the land crab. The insane poor were allowed to roam over the land or were looked after by their friends. If they became violent they were placed in the stocks or were cast into the city prison. The Commission has now provided both lazar houses and lunatic asylums. The hospital accommodation available on the canal area amounted in 1907 to 1,845 beds.

Then came the great undertaking of making reservoirs and of providing Panama and Colon with a good and constant water supply. As soon as this work was accomplished the numerous

shallow wells were filled in, water-butts, tanks and cisterns were removed, or, if left, were carefully covered in. Thus, in the year 1906, 307 wells were filled in in Panama City alone, while in the two towns 23,031 tanks or water barrels were dealt with. There followed upon this the still more extensive work of draining both the cities and carrying out a modern scheme of sewage disposal, of connecting the individual houses with the sewers, of introducing water-closets, and filling in the innumerable cess-pools. It is very noteworthy with what determination the Commission insisted upon the carrying out of the sanitary orders they had imposed. For example, in 1906 the canal zone police made no less than 584 arrests for violation of sanitary regulations, while in 1907, 925 persons were arrested for the same offense. In the criminal statistics for the latter year it will be observed for purposes of comparison that the charge of "disorderly conduct" heads the list with 1,176 arrests; then comes "violation of sanitary regulations" with 925; and in the third place "drunk and disorderly," with 787 arrests. Another great work undertaken by the Commission was the paving of the public ways in the two cities, and the levelling and draining of the roads. The state of the streets in Colon and Panama in 1904 was no better and no worse than that to be found in any of the old cities on the Spanish Main or in the adjacent islands. Those who would form an idea of the condition of these highways should visit Cartagena on the mainland, or the famous city of San Domingo on the island of Haiti. They would find there the surface of the main street as full of holes and gulleys as the bed of a dry torrent. To drive along these streets is an experience not to be forgotten. After a shower of rain the highway is a waste of mud interspersed by a hundred pools, which in the rainy season are never dry. The practice, moreover, of throwing all odd garbage into the streets makes their condition inconceivable. During the dry season these public ways are heavy with dust. In some of the smaller lanes about Cartagena the dust is as thick as the sand on a beach, and is only kept in check by the happy practice of emptying all slop water into the highway. To their other responsibilities the Canal Commission added the cleaning of the streets and the removal and destruction of refuse.

The most interesting work, however, undertaken by Colonel Gorgas and his staff was a crusade against the prevailing diseases on the isthmus. Of these the most important are yellow fever and malaria. Against yellow fever the inhabitants of the isthmus are immune, but they are not immune from malaria. Some 70 per cent. of the natives are the subjects of the latter disease, and it has proved most fatal. Taking the year 1907 as an example,

the mortality lists on the Canal Zone present the following features: The total number of deaths was 3,822. The chief contribution to this number was made by pneumonia, which accounted for 716 deaths. The liability of the negro to pneumonia is well known, and the prominence of this disease throughout the West Indian islands is very striking. The fact that pneumonia heads the death-list in every year has no doubt suggested to the Commission that a crusade against this malady is a pressing matter. No data are forthcoming to explain the prevalence of pneumonia in the islands. The negro spends practically the whole of his day out of doors in a warm atmosphere, which is subject to but little variation of temperature the year through. At night he retires to his tiny cabin, the windows and doors of which he literally seals up; and when the number of human beings who may occupy one of these cabins during the night is noted, it is astonishing that they do not die of mere suffocation. This habit of the negro of hermetically sealing his cabin at night appears to be due solely to his fear of jumbies or ghosts, which are very troublesome on the Caribbean coast and can enter through the smallest chink. On the isthmus the houses provided for the laborer afford the amplest cubic space per man and are perfectly ventilated. They are screened with copper gauze, the meshes of which are too fine to admit even the slenderest jumbie. It is evident, therefore, that the home cabin of the negro cannot wholly explain his liability to pneumonia, since it follows him to the isthmus. The next disease in the mortality list is malaria, which in 1907 was answerable for 605 deaths. Then come the following in order: Tuberculosis of the lungs, 304 deaths; enteric fever, 150 deaths; Bright's disease, 137 deaths; diarrhea and enteritis (mostly among children), 136 deaths; dysentery, 118 deaths. In this year the number of deaths from smallpox was three. The liability of the negro to acute nephritis is well known and is shown by forty-eight deaths in 1907 and sixty-four in 1906 from this cause. To beriberi are ascribed 111 deaths in 1906 and fifty-nine in the year following. This outline of the death-rate may be completed by adding that in 1907, 236 deaths were due to accident or violence, including eight suicides.

The plan of campaign against yellow fever is as follows: The houses are in the first place screened. This screening is very complete. In the better residences not only are all the windows and doors screened, but also the verandahs. I have lived for a fortnight in a screened house and never saw a mosquito, but was bitten when out of doors. Mosquito nets are entirely dispensed with. Within the hotel at Panama I never saw a mosquito and no nets are used. The spring doors seem to be quite efficient.

In the administration building guards are stationed at these doors to see that they are not propped open and that no one loiters in the doorway. In the fire buckets in this building larvæ are now never to be found. The *stegomyia* do not frequent the open country, nor do they breed in swamps or large bodies of water. They are "house dwellers" and require the protection of buildings, grass, foliage, etc. A system of house to house inspection was instituted to see that no mosquito larvæ were breeding; water-butts and tanks were destroyed or carefully covered over, while puddles in yards and elsewhere were oiled. Any subject of yellow fever was immediately isolated and "placed under a mosquito-bar." In order that no case, real or suspected, should pass unnoticed eight medical men were appointed in Panama City "to act as medical inspectors and to make a daily house to house canvass of the city, reporting all suspected cases to the Health Department." The house from which any case of yellow fever has been removed is cleaned and fumigated. It is made as nearly smoke-proof as possible, all cracks and openings are sealed with paper and paste, and each room is then fumigated with sulphur or pyrethrum. In from two to four hours the house is opened and thoroughly swept out, the sweepings being taken into the street and burned. Owing to the destructive action of sulphur, pyrethrum powder is in general use on the isthmus. As in the month of June, 1905, the number of cases of yellow fever had mounted to sixty-two, the fumigation of the entire city of Panama was resolved upon. Since twelve days must elapse after the mosquito has bitten a fever patient before it can transmit the disease, it was desired to complete the work within that period. It occupied, however, forty-four days. It is impossible not to admire the docility of the people of Panama, especially as they are themselves immune, and to note that even as late as 1907 no less than fifty-nine of these citizens were fined for "having mosquito larvæ" on their premises. The average number of men employed in fumigating in Panama City alone was (in 1906) 110.

The crusade against malaria has been even more elaborate. Every new arrival on the isthmus is handed a printed circular explaining the cause of malaria and the means of its prevention, and advising the constant use of quinine in doses of at least 3 gr. a day. Quinine is placed on the table in the dining rooms and boarding camps, and large quantities of the drug are distributed broadcast. In the month of September, 1905, for example, 675,000 grs. were dispensed, mostly for prophylactic purposes. A large number of men are kept constantly employed in cutting down the dense tropical undergrowth, in mowing or burning the grass, in making and lining ditches, in filling in swamps and in

oiling the surface of any pool or puddle in which mosquitoes might breed. Others are employed to inspect water tanks and barrels, to destroy such as can be dispensed with, and to screen such as are retained. As an example of the work of the anopheles brigade it may be noted that in 1906 in Colon alone the surface oiled amounted to 330,000 sq. ft. New ditches were cut to the extent of 200,000 lineal feet. Of these ditches 20,000 ft. were stoned or cemented. Two million lineal feet of old ditches were cleared, graded, stoned or filled in. The area of brush and grass cleared amounted to 21,000,000 sq. yds. Never has a crusade been carried out with such completeness, for never has a chief sanitary officer had so free a hand. It is needless to point out that the mere oiling of pools does not constitute the sole prophylactic measure against malaria. In a well-to-do town in the tropics it may be supposed that the land has been thoroughly drained and every suspected water area oiled, but there are still many varieties of vegetation which afford a breeding place for mosquitoes: as instances may be cited pines and such a palm as the traveler's palm. We may be sure that the pine grower will not sacrifice his harvest in the public interest, nor will the wealthy resident allow the palms, which are the glory of his garden, to be cut down. It is much to be hoped that a list will be forthcoming of garden and other plants in which mosquitoes breed. On the Canal Zone no such list was needed. The place denounced was swept bare.

On one point of interest the reports of the Commission are silent. They do state upon what grounds the crusade against the land crab is based. It will be noticed in the last report that in the course of the year in Cristobal alone no less than 30,566 crab holes were oiled and 10,571 crabs were killed. I am not aware that the land crab has ever been seriously studied from a medical or sanitary point of view. That the animal is a remarkable and agile scavenger is allowed; that his habits are disgusting and his place of hiding unhygienic are more or less evident; but I have not met with any account which accuses this creature of the dissemination of disease. The matter is of some interest. On the Island of Barbados, for example, are to be seen more land crabs to the square yard than I have noticed in any other part of the world, yet Barbados is a remarkably healthy island, entirely free from yellow fever and but slightly troubled with malaria. The land crab has there no price upon his head, and, except for the damage he does to gardens, graveyards, and roadsides, is not anathema.

Time will not permit of any account of the quarantine arrangements on the Canal Zone, nor of the very vigorous and successful

manner in which an outbreak of bubonic plague was dealt with in 1905.

It will be seen, I hope, from the above brief description that the Isthmus of Panama provides at this moment an object-lesson which those who control the destinies of men might study with advantage. It provides for the realisation of a long contemplated and heroic ideal—the medical officer of health with a free hand.

DISCUSSION.

The PRESIDENT (Dr. Newsholme) said Sir Frederick Treves had had a wonderful story to tell the Section, and those who had heard Sir Frederick before and had read his writings, would know that the story had lost nothing in the telling. The members, he was sure, were all much obliged to him. Panama was evidently an administrative Elysium for medical officers of health. The immense progress in sanitation there had been due to necessity, though that did not detract from the credit accruing for the work, and in that respect there was a parallel in our country, where cholera was the immediate determining cause of sanitary reform.

Sir SHIRLEY MURPHY said he had very much pleasure in proposing a vote of thanks to Sir Frederick Treves for his address. The subject was of entrancing interest to the section, and its attractiveness was much heightened by the manner in which it had been presented. He knew the author had experienced some difficulties in connection with preparation, but no obstacles were apparent in the reading, and the section was very grateful for the way Sir Frederick had presented the subject.

Dr. SANDWITH seconded the resolution of thanks. No one, he was sure, had enjoyed the paper more than he had, and he thought the author was a living illustration of how a man might cease to be a practitioner, might even, if he chose, cease to be a surgeon, but could not cease to be a citizen of the Empire; he might still do good work, and he (Dr. Sandwith) was glad to see that Sir Frederick had not ceased to be a teacher. The reader had made clear the different treatment meted out to the American medical officer compared with that accorded to his British confrère. At the time when yellow fever was stamped out in Havana the American medical officers were given military power, and he (Dr. Sandwith) suggested that medical officers of health in this country should try to get the same powers. It was a great surprise to him, after being some years abroad, to find the inferior position occupied by medical officers of health in this country compared with what their colleagues enjoyed abroad, for in the fight against epidemic disease it was essential to have officers who could be trusted to act. Sir Frederick Treves had spoken about yellow fever, malaria, and dysentery, and he (Dr. Sandwith) had been thinking how little the present generation realised the evils of malaria. Less than ten years ago the Egyptian army was reoc-

cupying the Sudan, and black troops were sent up the Blue Nile because they were supposed to be less susceptible to malaria than the Egyptians. Of course they were commanded by British officers. On coming to Karkog, a village about 300 miles from Khartum, the force consisted of 451 healthy men. Seventeen days later sixty-nine of them were struck down, and in another two days 380 men, or about 84 per cent., were down with malaria, ten deaths occurring within a few days. Of the thirteen British officers one died, six were seriously ill, and six were only slightly ill. From experience in the United States, Egypt and South Africa he could confirm Sir Frederick's statement as to the liability of the black man to get pneumonia. He had not an explanation to give for it but thought there were obvious contributing factors. It was not at all unusual for a European to live for years with arrested or cured tuberculosis but the African seemed always to succumb rapidly to it and when he had pneumonia he often died of it. Again a negro suffering from typhus was more apt than a European to die of hypostatic congestion of the lungs. One reason he believed was that the black did not take full breaths; he was generally a man of the plains unaccustomed to deep breathing and seemed to have no reserve of lung power which would tide him over a respiratory illness. Also the black seemed to have very feeble resistance to tubercle bacilli and pneumococci.

The resolution was cordially carried.

Mr. MALCOM WATSON said they had heard that night from Sir Frederick Treves an interesting account of the success with which the Americans had dealt with malaria and yellow fever in Panama. By the request of the secretary he was there to ask them to turn to the other side of the lantern and hear how a British Government had dealt with a somewhat similar problem. Panama was about 90° W. longitude the Federated Malay States were some 90° E. They were within 5° of the Equator had a heavy rainfall amounting to about 100 in. per annum and had been notorious for a malarious climate. Early in 1901 on assuming duty as district surgeon in the district of Klang he found the hospital full of malaria; Government officers were continually off duty with the disease. The town was smothered in jungle; acres of swamp abounding with anopheles stretched along the small hills on and around which the town was built. Setting himself to collect statistics of the disease, he was soon in a position to present a report to the Government of such a nature that money for drainage works was promised for the following year. Before, however, the year was out, the town was almost devastated by the disease, and the Chinese suspended business for three days in order that all their attention might be concentrated on processions, theatres, and such other rites as were essential to the driving of the devil from the town. As a result of the drainage, malaria had almost completely disappeared from the town, only some eight or ten cases per annum being found in which it was impossible

to trace infection from outside. The result of the work at Klang would have been very striking had it been alone, but at the same time as the drainage of Klang was undertaken the drainage of Port Swettenham was also carried out, with equally satisfactory results. There had thus been two entirely independent experiments. Unlike Klang, in which there were small hills, Port Swettenham was originally a mangrove swamp covered by all spring tides. It was always malarious, and early in 1901, he drew the attention of the Government to the necessity for antimalarial measures. The port was opened on September 15, 1901, and, in order to obtain statistics of the malaria, he deputed a subordinate to visit each house daily to record and treat each case of malaria as it arose. The epidemic, however, became of so severe a nature that the business of the port was completely disorganised and the propriety of closing it was discussed. A commission, consisting of Dr. H. Wright, Dr. E. A. O. Travers, the speaker and three inquirers, was deputed by Government to report on and carry out the necessary sanitary measures, and the commission carried out the measures which he had recommended some months before, viz., clearing jungle, drainage, and the like. The result of these measures was that within a few weeks the port was working smoothly and it was not found necessary to use wire gauze on the houses. From 1902 to 1907 Port Swettenham was practically free from malaria, but in 1907, as the result of the blocking of certain drains by new engineering works, a small outbreak occurred again. It was a very striking reversal of the experiment, but for the sake of the public health the drains had to be reopened as soon as the damage they were doing was shown. He did not propose to go into the statistics of the malaria of the two towns in detail, but some idea of the value of the antimalarial measures would be gathered from the following: in 1901, 610 cases of malaria were admitted to Klang Hospital; in 1902, 1903, 1904, 1905, the numbers were respectively 199, 69, 32, 23; while from the surrounding undrained area the numbers increased. Not only did the admissions to hospital for malaria diminish, but there was an extraordinary decrease in the number of deaths, not only from malaria but from all other causes registered in the town, showing to what an extent malaria predisposed persons to other diseases. The number of deaths from all causes registered in the two towns were, in 1900 and 1901, 474 and 582 respectively, and in 1902, 1903, 1904, 1905, were 144, 115, 122, 113 respectively, and again the deaths registered without the towns showed an increase. The children, too within the towns enjoyed an immunity from the disease in striking contrast to those outside: during 1904 and 1905 examinations of the children revealed no infection of those permanently resident within the towns, while in 1904, 33.89 per cent. were infected of 298 children residing outside of the towns. In 1901, Government officers received 1.026 days sick leave on account of malaria; in 1905 only thirty days leave was given, and this was given to officers who although

resident in Klang, had contracted the disease outside. Finally, he would like to say a word on the measures undertaken. In 1900 there was considerable discussion as to the relative merits of mosquito-netting, quinine and mosquito destruction. He followed the lines laid down by Ross, viz., mosquito destruction, and in order to obtain permanent results adopted drainage as the method. It appeared to him to be the method for towns, because, first, it was permanent and, secondly, it could be carried out independently of the coöperation of the population.

Professor RONALD ROSS, C.B., F.R.S., said that a very pleasant evening had been spent in listening to Sir Frederick Treves's most interesting description and Dr. Malcolm Watson's account of his good work, which was perhaps scarcely second in importance and elegance—if such a term were permissible in that connection—to that of Colonel Gorgas, and only in the extent to which it was carried out. The colonel had all the resources of the American Republic behind him. Dr. Watson's work had been most excellently done. The point as to the great prevalence and fatality of pneumonia had been dealt with by Dr. Sandwith. He quite agreed that that disease was frequently the terminal complaint following malaria, dysentery, and other things. The same kind of pneumonia statistics were obtained in India among the troops there, both native and European. With regard to mosquitoes in trees, he had just come from Mauritius, and it was the same there. On the average, one hole was found in every three trees; but they did not breed anophelines there, only stegomyia and culex. It was not necessary to cut down the whole tree; the simplest way was to fill up the hole with mud. His moustiquiers made a kind of concrete out of red earth and lime, which was placed in the hole, and he believed it effectually stopped it for a long time. One of the mosquito destroyers had to make a tour of the trees once a year and stop them up; but those holes did not cause much sickness in Mauritius, because they did not breed the anophelines. The same remark applied to land crabs and their holes. In Mauritius it was found to be only the big marsh which caused malaria, not a few pots full of water. It was true that the anophelines bred in small collections of water, but for an outbreak it was necessary that there should be many such small collections of water. In Mauritius a careful observation was kept of the rate of fall in the disease at different distances from a marsh. A few yards from the marsh the spleen involvement rate was 95 per cent.; a few hundred yards away the rate fell quite rapidly, and further away it was as low as 30 per cent. or less of the children. The question of circumvallation was a very important one. With regard to the use of petroleum, he did not think it was worth while spending much on that for malaria; drainage was best. Labor could be best employed in clearing waters and draining. He agreed with Dr. Watson's statement that engineers were sometimes very troublesome in connection

with operations such as had been described. There were many other points, all of great interest to him, on which he could talk for a long time, but the hour was late, and he must forbear.

Sir FREDERICK TREVES, in reply, said. With regard to the tree question, he asked Major Ronald Ross whether such a tree as the Madagascar or traveler's palm was not a serious breeding ground for the anophelines and other mosquitoes. When he, Sir Frederick, was in Trinidad there was an outbreak of yellow fever there, and that tree was thought by some to play a possible part in it. In their radical measures the Americans realised that there were other collections of water besides those on the face of the ground in which mosquitos might breed. Colon presented the additional difficulty that the swamp in some places was below the sea level. The Americans had another advantage in their sanitary work which was exceptional, *i. e.*, the privilege of what was called "dumping." The enormous mass of earth taken from the cutting could be dropped into the swamp. Thus the swamp at the back of Colon, which could hardly be drained, was being closed by being made a dumping place.

Colonel MACPHERSON, in continuing the discussion, gave some interesting and rather new facts about the subject of the paper, and said his excuse for doing so must be that he returned from Panama only last month, after studying, with Colonel Gorgas, the subject of Sir Frederick Treves's lecture. The reader mentioned that the Commission on Sanitation had absolute powers from the commencement of the work, but that was not so. Colonel Gorgas came from Havana, where he had extinguished yellow fever, in the year 1901, in eight months. He came to Panama, where to his astonishment, he found it took two years to blot out the disease. He told Colonel Macpherson that the probable reason for that difference was that when he started the campaign in Havana he had the advantage of two years of previous sound sanitary work and organisation in the city, whereas in Panama he had to start at the beginning, and had had very great difficulty in obtaining necessary supplies and authority to carry out thorough sanitary measures, even from the people who ought to have supported him. The chief engineer, the Governor, and the chairman of the Canal Commission had all joined in a recommendation that Colonel Gorgas's work should be discontinued—they said it was not practicable, or at any rate could not be put into practical execution. The object-lesson pointed by the facts was what Colonel Gorgas had set himself to do was practicable, and that it was the result of determining to triumph over obstacles. He was sure that a remark contained in a letter of Colonel Gorgas's to him—namely, that "successes on these lines would make the work of future sanitarians easier," was one which all would agree with. He (the speaker) had carefully studied the cost of such work, and it was not so great as would be imagined. Colonel Gorgas received \$2,000,000 for extinguishing the disease

in that zone, and that included all the hospital work for the treatment of the sick, as well as measures for the prevention of disease. The amount spent in actual prevention was only \$500,000 per annum. That worked out at an insurance of $2\frac{1}{2}$ per cent. on the estimated cost of the canal for preventive work alone. Another interesting point about the sanitation at Panama was that it was despotic hygiene. President Roosevelt had told him that he could not get the same results in the best cities of the States as he could in Panama, simply because of that system of despotic hygiene. What Sir Frederick said about the punishments meted out to those who had larvæ in their houses seemed surprising, but it was perfectly true. In Colon, occupiers of houses were fined 50s. if larvæ were found in the houses, but the same man had never to be fined twice. In regard to pneumonia, Colonel Gorgas had appointed a commission of medical officers and inspectors of health to go into that, and they studied the subject very thoroughly. Only one fact seemed to be established—namely, that negroes who got pneumonia always did so within three months of coming to the Canal Zone, and this pneumonia seemed to be the general sequel to attacks of a catarrh of the respiratory passages of the nature of influenza. The draining of the swamps, so as to get rid of malaria, was the chief trouble in the zone at present. Colonel Gorgas adopted the means shown in Dr. Watson's photographs—namely, draining along the contours—not along the center—and in order to minimize the cost of keeping drains clear he had begun to lay agricultural drains along the line of drainage trenches, covering them with loose stones and clinkers. The anopheles would not grow unless there was vegetation along the banks of the streams, drains, or pools, and no vegetation grew where this method was adopted.

Activities and Interests of the Buffalo Academy of Medicine.¹

By ALLEN A. JONES, M.D., Buffalo, N. Y.

IT becomes my pleasant office to address you in reference to the activities and interests of the Academy of Medicine at this its annual meeting. So efficient has been the work of the officers of this organisation in preceding years that but few avenues of advance and achievement seemed open when the year began. Fortunately, however, the president of the Academy found himself associated with so capable, zealous and industrious a body of co-workers in the council and general membership that the task of upholding the traditions of the Academy and of furthering its good work was made easier. The officers of the various sec-

1. Presidential address at the annual meeting held June 9, 1908.

tions prepared with commendable despatch excellent programs for the ordinary weekly meetings and also for the stated meetings. All sections have been well attended throughout the year and your president embraces this opportunity of expressing his highest sense of appreciation of the unflagging interest the section officers have shown during the past season, of the fine order of the work accomplished in their sections, and of the efforts they have made to increase the attendance at the meetings and to stimulate the coöperation of all the members of the Academy in the scientific, the ethical, the social work of our organisation. The spirit of good fellowship that has made itself manifest in our midst, quite precludes any but the kindest feelings and good sense of justice when especial attention is called to the unprecedented attendance at some of the meetings of our surgical section. With unselfish sacrifice of time and other things involved by absence from home, eminent members of our profession from other cities have contributed to our pleasure and profit by notable scientific presentation at our meetings. At this the closing meeting of the year it seems fit to express anew the deep sense of appreciation of the Academy for the presence and contributions of our guests.

Pray let me here voice my gratitude to the chairmen and members of the special committees reporting tonight. I am not unmindful of the onerous duties imposed upon them nor of the generous manner in which they have discharged such duties. It falls within the province of physicians to interest themselves intimately with questions affecting the health and welfare of the community, and it was this thought that prompted me to appoint the several commissions that report this evening. To the members of the council individually and collectively allow me to express my thanks for their kindly and courteous and faithful co-operation and help. We have had ten council meetings that have served to demonstrate, among other things, that frank independence of opinion is not incompatible with effective collective work.

Also recognition of the hard work, well performed, of our able secretary is fitting here. The extraordinary labors that have been imposed upon him this past year furnish an evidence of the activity of our organisation and the Academy has been well served throughout. I wish to make public acknowledgment of the courteous assistance our secretary has at all times extended to me.

The committee on the Academy building has found it impossible to accomplish more than to engage the sympathetic interest of the Academy in the acquisition of its own home. Progress, however, has been made and in due time, I have no doubt, we

will have a suitable building in a suitable situation. Our financial position grows stronger each year and eventually no burden whatever will be imposed upon us by an acquisition of a reasonable property. But even in the event of an Academy building becoming a slight obligation is that a sufficient reason for abandoning so laudable a project? It certainly is not in my view. On the contrary, it should serve as a stimulus for greater and better achievements. What are difficulties for in this world if not to increase our efficiency and raise us higher in our activities, our perseverance and our unselfish devotion to worthy ends. We are agreed as to the desirability of progress in the life and work of the Academy; we should allow no minor considerations to turn us away from a laudable project. Our interests will be notably advanced by surmounting some difficulties. We all face obstacles and perplexities daily but we do not turn away from them; let us be true to our higher aims. We ought to have our own building of simple but classic and dignified construction. We want that building to symbolise scientific progress and ambition. We want it to be the home and center of a larger, better spirit in the profession, free from petty jealousies and rivalries. We want it to foster comradeship and good-fellowship in our profession. We want it because we are co-workers, because our interests are one, because in unity there is happiness as well as strength. We want it to dispel discouragement and to exemplify that while many things crumble away institutions live. We want it because it will represent a fitting accomplishment, obstructions thrown aside and difficulties vanquished. We want it because it is eminently appropriate that the medical fraternity in this great city should have a temple of its own and because it will serve to illustrate our devotion to the art and science and literature of medicine. If the time is not yet here, if it must be postponed for awhile do not let the higher possibilities of the Academy grow distant and faint upon the horizons of your memories.

436 FRANKLIN STREET.

SOCIETY PROCEEDINGS.

Buffalo Academy of Medicine

Report of the Subcommittee on Seats and Posture of Children and Stairways.

The subcommittee has visited a number of schools and has reached the following conclusions: the desks in the schools at present conform very well in general to the types advised by foreign and other authorities; as to the angle of slant of the desk

tops; as to the back of the seat projecting forward to fill in the lumbar hollow of the spine; as to the length of the seat; as to the height of the seat; as to the slope of the back of the seat. In many rooms there is one row of desks in which the height of the seat and of the desk top can be adjusted to the child by means of a wrench. In some rooms are small footstools for children with short legs. In one class in one school all the seats were a little too small. In some classes there are naturally several pupils of small size who find the seats too large. Also there are dull, overgrown pupils who find the desks and seats too small. This is provided for partially by having one row of desks of a slightly smaller size in some of the rooms. About 80 per cent. of the pupils were sitting straight even toward the end of a session; the remainder were twisted sideways or leaning on the desk-tops, or bending close to their books, and the like. The teachers seemed to be alive as to the posture question and they must vary individually as to how strongly they enforce the matter.

Some of the stairways were found to be old, and to have the treads badly worn; in many of the older schools the treads are wood and might be replaced by some other material, of an unflammable nature.

We think there is need of more study of the question; need of frequent inspection by a corps of men who, being paid for their services, would give the subject attention; and need of occasional lectures by these men to the teachers on this and the allied subjects.

(Signed)

PRESCOTT LEBRETON,
A. E. WOEHNERT.

Report of the Subcommittee on Cleanliness.

One of the most important means of maintaining the health of school children is the enforcement of reasonable cleanliness in the school rooms and premises. Such a proposition seems elementary, yet is violated daily in most of the public schools in Buffalo.

The most general and most flagrant violation of ordinary rules of cleanliness is found in the methods of sweeping and dusting. In most of the schools sweeping begins promptly at 3 o'clock, the hour of dismissal of the last classes. All rooms and halls are swept out daily from 3 to 5 o'clock in the afternoon. The sweeping is done with dry brooms and with the windows closed. The mud and dirt that is unavoidably brought into the school, especially in bad weather, is thereby stirred up and much of it is simply swept from the floor into the air as dust. This dust then settles down again upon the floors, desks, chairs, walls, etc., and

remains until the next morning, when dusting takes place, between 7 and 8 o'clock. This consists of "*dry dusting*" or stirring up the dust that has settled upon chairs, desks and walls with feather dusters and again diffusing it in the air, where it is ready to injure the health of the children when they assemble in the rooms shortly before 9 o'clock.

The dust evil is the most general, most striking and most easily remediable fault of cleanliness that we have found and we desire to emphasize it and point out how inexcusable and unnecessary this evil is, as is proved by the contrast of the few schools where proper methods of sweeping and dusting are employed.

The floors should be sprinkled with damp sawdust or a substitute before sweeping and dust should be removed from desks, chairs, etc., by wiping with damp cloths.

In some of the schools substitutes for wet sawdust for sprinkling the floors before sweeping have been tried and found most satisfactory. Some of these substitutes are better than sawdust, cheap, non-inflammable, and effective allayers of dust. One of these preparations has been used in Public School No. 36, at a cost of about \$1 per month, and with an effectiveness that has won the approval of all concerned.

Many other criticisms relating to cleanliness in the public schools might be made, but we have directed special attention only to the commonest and worst fault. In general it may be said that the cleanliness of any school depends upon its age, construction and intelligence and efficiency of janitor service. These factors vary in the different schools to a considerable extent. The factor that ought to be under better control is the janitor service. Each janitor is responsible to his principal. It is the principal's duty to insist upon proper standards of cleanliness and to report inefficiency of janitor service to the Superintendent of Education, whose power of appointment and removal of janitors in the public schools is absolute. In addition the Board of Health possesses ample power to enforce all proper regulations for making the schools clean and sanitary. Public opinion must find expression and help these public officers to maintain good hygienic conditions in the public schools.

In conclusion, we make the following recommendations:

1. The public ordinance relating to the duties of janitors in the public schools should be amended so as to prohibit dry sweeping and dry dusting as a general daily practice, and to prescribe that wet sawdust or an efficient substitute be used on the floors before sweeping and that all dust be removed from chairs, desks, etc., by damp cloths.

2. Intelligent public opinion should be aroused to hold janitors, principals, the Superintendent of Education, the Health Commissioner, or other officers, responsible for the steady enforcement of proper rules of cleanliness in the public school buildings.

3. A uniform standard of cleanliness should be adopted by the Superintendent of Education and enforced upon the principals and janitors in all schools, instead of allowing, as at present, each one to determine the meaning of cleanliness.

4. The walls and ceilings of rooms and corridors should be painted with oil paints instead of being tinted with water colors, in order to permit thorough washing with soap and water.

5. In the construction of new schools all toilet closets should be placed in extensions from the main building, in order to keep foul odors out of the main building.

6. Boiled (or distilled) water should be provided for all pupils who may desire a safe drinking water or whose parents direct its use. Filtration by ordinary methods does not insure a safe drinking water and should be condemned as a dangerous measure.

(Signed)

IRVING P. LYON,

MAUDE J. FRYE.

Report of Subcommittee on Ventilation and Heating.

The public school buildings of this city are variously ventilated and heated. In the more recently constructed buildings a fan located in the basement and operated by a steam engine draws in the air from outside and then forces it through the various classrooms and out again at the roof. This is called the plenum system. In the very latest buildings presenting this system the heating is accomplished mainly by what is called the direct method, that is, by means of steam radiators placed in the various classrooms and halls. The air forced in is simply for the purpose of ventilation. It is not relied on to heat the building. It is warmed to a temperature of about 70°F.

In many school buildings, however, having the plenum system of ventilation, the heated air blown in is the only source of heat for the building. Since in this method the heating of the air is not accomplished directly in the separate rooms, but at a distance in the basement it is called the indirect system. In this indirect hot air system the air chamber in the basement is divided so that a portion of the air passing over steam coils is heated to about 60°F; while the remainder passes over a large number of coils and is heated to about 120°F. Each class room is connected by air ducts in such a way that a thermostat located

in the room controls valves and dampers and determines whether air at 60°F or at 120°F enters the room. The heating of the room with this method depends upon the amount and the temperature of the air blown in.

In many of the school buildings the vacuum system so-called is in operation. Here the fan is employed to draw the air out of the class rooms. In this system the fan is generally in the attic, located in a chamber into which empty the air ducts from the various rooms. The fresh air enters at several openings in the basement and passes over steam coils to be warmed to a proper temperature before entering the class rooms. With this system of ventilation we may have either direct or indirect heating.

In some school buildings an attempt has been made to combine the plenum and the vacuum systems by placing fans both in the basement and in the attic—one to blow air in, the other to draw it out. There are also numerous schools in which there is no mechanical device for creating air currents. These present two classes. In the first, the heating of the air is relied upon to create a current. The hot air furnace exemplifies this type. Because of the difference in quantity of air at different temperatures this is often called the gravity system. In the second variety no artificial heat is utilised and the air current in the air shafts, if any, depends upon the difference in the temperatures of the outside air and of that within the buildings. This method has been called the natural system. Finally, there are school buildings where windows are practically the only reliance for ventilation. In some instances deflectors for preventing direct draughts are provided. In other cases these are lacking.

During the last few years, several examinations have been made, under the auspices of the Department of Health to determine the amount of air furnished; its diffusion in the class rooms and the degree of its contamination. The reports of these examinations are on file at the office of the department.

Of all the schools thus examined only two have shown perfect ventilation. These are the Lafayette High School and the new No. 24 Grammar School. The ventilating systems of both of these schools were planned by and installed under the supervision of Mr. Woodbridge, a sanitary engineer connected with the Massachusetts School of Technology. These two instances prove that a system of ventilation can be devised and installed which will give adequate ventilation. In nearly all the other schools of this city the ventilation is very seriously inadequate; and what adds to the difficulty is that attempts to supplement this inadequate ventilation by opening windows disarranges the mechanical systems and often makes matters worse. The reason for this is

clear when it is understood that in the plenum system, for example, the air is forced into a chamber from which it is carried to the various class rooms by means of air ducts. The air being under pressure it naturally goes where there is the least resistance. If one or more windows are opened in one of the class rooms a disproportionate amount of air escapes by way of this room, and this at the expense of the rest of the rooms. Therefore the rule that windows must be kept closed. But when the amount of air furnished by the fan system is inadequate, and when also perhaps its diffusion about the room is imperfect, the result is a serious harm to the well being and health of the teacher and children.

The expense of these ventilating plants is large. In view of their very general inadequacy and the serious consequences to health, a decided change is demanded. Either the city should employ a thoroughly competent and honest sanitary engineer to see to it that the plans are scientifically correct and that the installation is in honest accord with the plans, or the pretense should be stopped, and all mechanical systems be abolished.

Reliance upon open windows with some devices for deflecting draughts and perhaps for warming the entering air would be far better than the present costly inadequate and health destroying systems now almost universal in our schools. Want of scientific understanding is seen all about, and the examples of positive dishonesty have not been few in the past.

Meanwhile the condition may be much improved by a general opening of doors and windows for a few minutes at least once during each morning and afternoon session. This periodical airing with contemporaneous calisthenic exercise we strongly advise and urge.

The heating of the public school buildings is in general fairly satisfactory. The best system in use is that found in the later schools—namely, direct heating by steam coils. In the schools heated by hot air blown in by a fan and controlled by thermostats the sudden change from air at 120° F to that at 60° F, or vice versa is unpleasant as well as detrimental to children sitting in line with the column of entering air. Other objections to this method are that to heat a single room involves operating the engine and fan and that a failure of either means inability to heat the building.

Stoves have practically disappeared except in a few of the annexes.

(Signed)

P. W. VAN PEYMA.

MAX KEISER.

H. K. DE GROAT.

Report of the Committee on Lighting and Shades.

In the main these conditions were found to be very good, excepting for the teachers and left-handed pupils. Generally, the light comes from windows on the left of the pupils which is as it should be for those who are right-handed; but some rooms have windows in the back end, which are very trying to the eyes of the teacher.

There are from two or three to a dozen left-handed pupils in each school, and for these, the lighting arrangements are exactly the reverse of what is proper.

We would recommend:

1. That windows in the ends of rooms, facing either teachers or pupils be closed in every instance when sufficient light is obtainable from side.

2. That all left-handed pupils be supplied with desks facing in the opposite direction from the others, so the light will come from their right sides. This may easily be arranged.

3. That all shades be of the adjustable type, admitting light both above and below, dark yellow or light green in color and so arranged as to distribute the light as evenly as possible throughout the room.

4. That all ceilings be tinted a light yellow and all side walls be painted a medium green shade and without luster because it is important to avoid reflections.

(Signed)

L. BURROWS, JR.

JOHN R. GRAY.

PROGRESS IN MEDICAL SCIENCE.**The Care of the Children During a Hot Summer.**

By J. BERNARD DAWSON, M. B., F.R.C.S.
Late House Surgeon, The Children's Hospital, Brighton.

(*The Hospital.*)

TO every medical practitioner, whether he be engaged in private work or in that of an institution, there falls a share of minor infantile ills attributable to the atmospheric conditions which prevail during hot weather. One may feel competent to manage a case of acute pneumonia or intussusception and yet be at a loss when confronted with a vague maternal description of the sickness of a child. To parents, however, these ills are very real, and much discredit may come to a doctor who fails to relieve or satisfy.

Setting aside the large subject of the symptoms, diagnosis, and treatment of acute summer diarrhea, there are certain lines of inquiry and treatment to be adopted when face to face with the lesser evils attendant upon the juvenile population at this season of the year.

Unfortunately, the conditions of life among the poorer classes in large towns are such that little can be done at present to alleviate the suffering of the children. The apathy of parents, the regulations of schools, and the denseness of population handicap the profession too severely for adequate or practical handling of this problem. Something, however, can be done, even among the poorest, if regular, reiterated, and importunate attention be drawn to the benefits to be derived from sterilisation of milk, destruction of waste vegetable matter, avoidance of doubtful fruit, fish, and ice cream, and above all to an intelligent use of the green oases with which our big cities are scattered. Among the better-to-do and educated classes much can be done to prevent and to cure the troubles attendant upon high temperature.

1. *Clothing*.—During the past ten years great revolutions have taken place in the clothing of children. Fortunately these changes have been, in the main, directed by logical ideas of hygiene and health. Nevertheless there has been, as in all reaction, too long a swing of the pendulum. The bare or sandal-footed infant, clad in scanty garments of cotton and scantier underclothing, is undoubtedly pleasing to the asthetic eye, but it is by no means certain that such attire is ideal from the standpoint of health. Too often the clothing is cut down to a summer standard at the expense of underclothing, leaving much of the lower limbs and pelvis exposed. Two evils are attendant upon this: (1) The prevalence of dust, the increased outdoor life, the delights of the hayfield or the orchard make it unwise that half of a child's body should be exposed to the attacks of insects and bacteria which abound in such surroundings; (2) even in our best English summers, the advent of evening brings with it a marked lowering of the temperature and heavy dews. Much evil can be wrought by the exposure of underclad, over-heated children, tired at the end of a day's play, to this change of atmosphere. The summer clothing of children should by all means be as light and airy as possible, but it should also aim at an adequate protection of legs and abdomen from the ravages of mosquitoes, midges, harvest-bugs, hay-spiders, and insect plagues in general.

2. *The Night Nursery*.—Little need be said on this subject, for the value of the open window, the light bed-hangings, and severe furniture now fashionable is apparent to all think-

ing parents. But in the midst of a hot month to leave a window wide open without preventing the entry of parasitic insects is merely to ask for restless children, broken sleep, and matutinal peevishness. No Indian ayah would leave her charges unprotected from the pests of an Eastern night. Those who have had the misfortune to treat the results of their onslaughts know what a real pest the English mosquito has become. Muslin stretched upon a frame made to fit the window affords a simple and inexpensive means of admitting air freely, but excluding the unwelcome guests.

3. *Diet*.—There is little doubt that vegetarianism is for children the safest and most salutary mode of life during hot weather. The inclusion of light soups and small quantities of meat, while doing little or no harm, seems unnecessary at a season when fresh fruit and vegetables are so abundant. Probably the citrates, malates, and tartrates of such fresh vegetation exert a corrective influence upon the intestinal and hematic functions. Eggs are a most useful addition, and their substitution for the traditional breakfast bacon is most beneficial.

Porridge, popularly supposed to be "heating," is better avoided. As a bulky carbohydrate food it is unnecessary at a season when meals should be light and undue fermentation is easily established. Fish, if above suspicion and lightly boiled—not fried—is an admirable addition to the juvenile dietary. Sweets, chocolate, ices, even when of the highest character, should be treated with reserve and given sparingly.

4. *Exercise and Recreation*.—A mistake often made is to send children out when the heat is extreme. Outdoor exercise cannot be too highly praised, but exposure of children to a July sun at midday is injurious and oftentimes cruel. The shady spots of such happy places as Kensington Gardens are limited, and many children can be seen there daily, obviously suffering from heat, and heat alone. Unless deep shade can be assured children are happier and healthier in a well-aired nursery than out of doors during the hottest parts of the day. Before 10 a.m. and after 5 p.m. they may be out for games to their hearts' content, but between those hours great care and discretion should be exercised where little children are concerned.

5. *Medicine*.—Observance of simple hygienic rules should render unnecessary the resort to drugs. Nevertheless there are occasions when such are useful. The addition of a little oil of eucalyptus or oil of bergamot to the morning bath will help in no small way to ward off the attentions of insects. For stings and bites nothing is better than:

R Liquoris carbonis detergentis..... 5j.
 Aquamad. 3x
 Misce fiat lotio.

For slight irregularities of defecation the old-fashioned succus taraxaci or fractional doses of calomel are usually sufficient.

For papular eruptions attributable to excessive heat, pulvis sodæ tartaratæ effervescens, given as follows, will be found very useful:

R (A) Sodæ tartaratægr. xx.
 Sodii bicarbonatis gr. v.
 Misce fiat pulv.
 (B) Acidi tartarici gr. v
 Fiat pulv.

S. Dissolve A in a wineglassful of cold water, then add powder B and give whilst effervescing.

The regular use of the popular lemon-kali has a similar effect.

6. *School*.—In those classes of society whose children are not under the hard and fast rules of compulsory attendance at school, useful latitude can be allowed in attendance during the hot months. Regular but light scholastic work occupying the middle of the day is perhaps the best way of occupying a child's time, provided that the conditions are good. It would be well if all parents would pay a visit to the room their children occupy for their lessons during a hot morning. The overcrowding of children into an imperfectly or improperly ventilated room demands a heavy toll on their health and energy.

The introduction of State open-air schools sets an example to the wealthier classes. Children enjoy their work, gain more benefit therefrom, and do no injury to their health, if lessons are given in a suitably chosen and shaded spot in garden or field.

7. *Holidays*.—From a child's standpoint the choice of a holiday ground is of great importance. To take a child from Hampstead to a relaxing South-Coast watering-place does more harm than good. Similarly, to remove from a school in a bracing north county to a Kentish holiday haunt is an injustice to health and common sense. Big seaside towns, where the air is often a pot-pourri of asphalt, petrol, and dust, are again often of no benefit.

Many villages high up on the South Downs, and many glorious seaside villages in the south-west counties of England and Wales, offer ideal air and surroundings for children, albeit the band be absent and the golf links inferior.

In cases of relapsing epididymitis the prostate is often the source of infection even when distinct signs of chronic urethritis are absent.—*International Jour. Surg.*

The Treatment of Whooping Cough.

By EDMUND HUGHES, M.R.C.S. Eng., L.R.C.P. Lond.

(*The Hospital.*)

A NUMBER of new remedies for whooping-cough have been suggested of late years, and the main object of this article is to bring these together in a convenient form. After the end of the first week the child may be provided with an abdominal binder, which is to be worn night and day throughout, and is in very many cases valuable in limiting the paroxysms and preventing vomiting. If the binder is to succeed it must be well fitting and sufficiently tight. Hospital out-patients may have a muslin or partly woollen material adjusted on the spot by a nurse, but the better plan is to have a belt made of flannel or linen front and back with some slightly yielding material, as elastic webbing or stockinette, let into the sides, the back being laced up to the degree of tightness necessary for control of symptoms without undue constriction. Dr. T. W. Kilmer (New York) advises the width to be from four to eight inches, according to age, the length three inches less than the abdominal girth at the navel. These details are important, for the success of the binder probably depends on their being followed.

For drugs an innovation is tincture of *grindelia robusta*, given in half-dram doses in sweetened water four times daily. Two fluorine compounds have had favorable notice—*i. e.*, antitussin ointment (one daily inunction of about 5ss), and solution of fluoroform, a drug whose use in pertussis was reported on this year by Tessier in France, but which needs further testing. If a nightly sedative is found necessary, codeine (gr. 1-12 to 1-8), heroin (gr. 1-25 to 1-15), or chloral 5 to 10 grains in enema may be tried. Other recent combinations are codeine or morphine gr. 1-40 in syrup of tolu ʒj., from ʒss.-j. being given three or four times daily; and this dose may be combined with 1, 2, or even 3 grains of antipyrin after the second year, according to age and severity.

The above measures, together with a diet limited in starch and excluding foods likely to irritate the pharynx (such as gritty preparations and acids in food or drink), seclusion from non-infected children, and abundance of fresh air, summarise modern ideas in uncomplicated cases. But there are three or four further suggestions in recent literature that call for notice. One is vaccination. The possible efficacy of this has been known for some years, but latterly a fresh series of cases has forced it on the practitioner's attention as worth a trial in obstinate cases. Another is chloroform narcosis for twenty minutes to full sur-

gical degree. Only a few days' effect is claimed for this and in some cases, but the results are so far contradictory. In one case of the writer's symptoms recurred with their former vehemence as soon as the patient had recovered from the immediate effect of the anesthetic, but four days later the cough, which hitherto had been extremely severe and prostrating, rapidly abated, and afterward hardly needed treatment. The latest suggestion of all is to give the milk of animals which have been injected with antitetanic serum (for particulars see *Lancet*, June 20, 1908).

Though formalin vapor and carbolic acid inhalations are of doubtful value, iodide of ethyl vapor may be inhaled with the object of mitigating cough. Oxygen inhalation is especially called for when cyanosis is so marked and persistent that convulsions or lung-collapse have to be feared. It is most effectively administered at night.

When the spasmodic stage is nearly ended a prescription commended by Dr. Eustace Smith may be tried—tint. cantharidis mij. with 5 minims each of paregoric and tincture of cinchona ter die. Much may be done to hasten convalescence by a close attention to the digestive tract. A frequent late syndrome is complete loss of appetite, with a slimy tongue, great restlessness at night, and intermittent looseness of the bowels. This may often be most effectively met by a mixture of sod. bicarb. gr. vj.-xij. in infusum rhei ʒij.-iij. three times daily between meals, followed in a few days by a mixture of tincture of hydrastis, sod. bicarb., gentian and an aromatic, and a small dose of calomel every second or third night. With these a diet should be arranged so as to include a minimum of sugar and starch for weeks together.

Medico-Legal.

By E. S. McKEE M. D., Cincinnati.

LAWS CONCERNING CREMATION.

CREMATION and crime might go hand in hand were it not for stringent laws. An interesting case has occurred in England though there was fortunately no crime concealed. The wife of a medical man fell ill with measles complicated with bronchitis in the eighth month of her pregnancy. On the day of her death her husband with the consent of her brother, who was also a medical man, delivered the patient instrumentally in order to relieve the dyspnea from which she was suffering. The child was born dead and the mother died in a few hours but would have died sooner, the husband considered, but for the relief afforded by

premature delivery. The undertaker was sent for and when told that it was desired that the body be cremated he produced the necessary form to be filled up. He was informed that the deceased had given birth to a stillborn child and he stated that the child could not be placed in the same coffin with the mother, and did in fact, later, bring to the house a second coffin for the reception of the body of the child. The father, however, expressed a wish that both bodies should be placed in one coffin. The undertaker superintended the preparation of the bodies, placed both of them in one shell and then removed them to the crematory where they underwent cremation. When the sides of the coffin fell away the superintendent noticed the body of a child lying at the feet of an adult corpse. For sentimental reasons action was brought against the undertaker. The prosecutor said that there seemed to be a want of frankness in the way in which the death certificate was made out. In a certificate from a medical man, which must be given before any body shall be cremated it was, he said, in the highest degree desirable that all the circumstances should be set out in regard to a death. As the deceased was suffering from two diseases—measles and bronchitis—it was clear that her death was accelerated by the death of a child, whereas the certificate made no reference whatever to that contributory cause of death. The husband when giving evidence said that when the defendant brought the coffin for the child he thought it better that both be cremated in one shell. He knew nothing about the regulations, nor had he any intention of deceiving the company or anything to do with drawing up or signing the certificates. There was no reason why, subject to proper certificates the two bodies might not have been cremated in one coffin. The court held that the responsibility of the defense had been proven and said that to mark the importance of the regulations being carried out literally and properly he assessed a fine and the costs amounting in the aggregate to about \$75.00. It would be easy to criticise in this case but for sentimental reasons we will desist. Never having been placed in such a trying position as the husband and father and physician in this case it would hardly be fair to say what we would or would not have done under the circumstances.

LENIENCY OF COURTS WITH INSURERS WHO ARE INACCURATE

IN A case brought up recently the insured had been asked, "Have you any illness or infirmity" and "If you have any illness or infirmity have you fully recovered from it?" His answer was

"Had none." It appeared that ten years before the insured had had a miscarriage and required the use of instruments to complete delivery. The company disputed the liability on the ground that the answer was untrue. Although the company was held liable on other grounds the judge who tried the case expressed the opinion that the miscarriage was not an illness or infirmity and therefore the answer was not untrue. This decision is in accord with many older ones which go to show that the courts will not readily void a policy on the grounds that the insured has answered a purely medical question untruthfully. In a case mentioned in the *British Medical Journal*, March 4, 1905, an applicant was asked, "Have you ever met with an accident?" He replied "No." Whereas it was proven that he had fallen only a month before and had actually made a claim against an accident insurance company in respect to the injury so sustained. The court of appeals found that this was sufficient to vitiate the policy though the jury found, "the injury received was not of sufficient importance to need mentioning," and that "the answer was in substance true." A lady who had insured heavily had answered in the negative the question, "Have you at any time had brain fever or any other diseases of the brain?" She was later found dead with the remains of a bottle of poison by her side denoting suicide. The insurance company resisted payment on the grounds that she had concealed the fact that she had suffered an attack of acute mania following influenza. After treatment she recovered. She had been told that she was suffering from a nervous breakdown. The jury found that she had "foolishly not fraudulently" concealed the fact that she had had this illness. Judgment was given for the company but as no fraud was proven the premiums were ordered returned.

DEATH UNDER CHLOROFORM AND ACCIDENT INSURANCE.

A TEAMSTER carrying accident insurance was injured during work the injury resulting in a dislocated hip-joint. He was put under chloroform and succumbed under the anesthesia. The insurance company refused to pay the insurance claiming that death was due to the anesthetic and not the accident. The courts decided adversely to the company, stating that the accident was responsible for the injury requiring the anesthetic, and that the insurance consequently covered death for this cause. The point was emphasised that an unsuccessful operation for conditions resulting from an accident does not release the insurance company from its responsibility.

FALLEN IDOLS.

HAVING walked the wards of Saint Thomas's Hospital mid the ministrations of Florence Nightingale, sailed the Bosphorus and the Black Sea where her first victories were won, being proud to believe trained nurses, the Anglo Saxon variety at least, to be as pure as their spotless uniforms, or, as Shakespeare put it, "so dutious, diligent, so tender over her occasions, true, so neat, so nurse like." some recent developments are shocking. I once had a patient, a young woman, fair to look upon, who had served a term in each of three sporting houses. She had had the syphilis and gonorrhea and was lazy and trifling, without the first requisite for anything decent. Tiring of sporting she conceived the idea of taking up nursing. She had the unlimited gall to apply to be taken in at the private hospital of a medical friend of mine and gave me as reference. A letter came asking for recommendations. They were not produced. She was not taken in to this hospital to learn to be a nurse and I lost the bills she and her relatives owed me and lost them as patients. She applied and was admitted as a pupil in a New York Hospital. In a short period she will be a pretty pious nurse. Some day a weak and foolish man will fall under her care and in the silly stage of convalescence after a long illness, wealthy, perhaps, and somewhat advanced in years, yet not "too old to fawn upon a nurse," will propose in a fit of gratitude and be coyly accepted. I know, in fact, of another case where just this has happened. Let us hope that the man she gets will be just as bad as herself. I know of another case where a trained nurse seduced (advisedly) a handsome youth, afterward gave birth to twin boys, blamed them on the youth, got a divorce, married him, had him adopt the babies legally, and when proving unable to support them, left him and is now on the lookout for another victim. I know of another graduated trained nurse who is never so proud or happy as when she has succeeded in producing an abortion on herself, which, according to her statement, occurs about every other month, and who, if you would believe her has all the doctors she has nursed for, "on her list." Taking these startling facts into consideration it behooves schools for nurses to be more careful whom they admit to their classes. I am happy to say that these are, of course, very great exceptions to the average trained nurse.

Therapeutic Notes.

LA CLINIQUE, Paris, No. 32, May, 1907, calling attention to the fact that collargol would be discussed at the next Congress of Medicine in Paris, requested of its readers reports of their exper-

iences with the remedy, whether good or bad. Of the responses received, all of which were favorable, the following are cited: Dr. Ruysen had unguentum Credé inuncted repeatedly in a puerperal pyemia. Thereupon the lochias became copious and assumed the color of collargol solution, retaining it as long as unguentum Credé was used. Simultaneously with this phenomenon, which he ascribes to an excretion of collargol by the mucosæ of the inner genitals, a progressive retrogression of temperature and rapid recovery ensued. He also reports a dangerous erysipelas, cured with the ointment.

Professor Jeanbran has always seen success from a treatment of acute cystitis which he learned from Tavel in Berne, consisting of the daily injection of 10 to 20 cc. ($2\frac{1}{2}$ to 5 drams) of 1 to 3 per cent. collargol solution into the bladder. While silver nitrate injections are agonising, collargol causes no painful reaction whatever. Moreover, collargol more quickly inhibits the pain of the cystitic process and appears to have a more energetic action on the infectious cause. In chronic cystitis its action is less striking, as is the case with silver nitrate, since the causes (prostatic hypertrophy, and the like) continue. Here also collargol irrigations and injections are preferable, because of their painlessness. Dr. Frère has for some years used collargol in all acute infections to his satisfaction. He enumerates, as especially convincing, three cases—a grippe with pronounced meningeal symptoms, a double broncho-pneumonia, and an acute articular rheumatism; in these the sequence of the change in the clinical picture upon the intravenous collargol injection was particularly striking.

In a discussion of puerperal septicemia (*Amer. Jour. Obstet.*, June, 1907.) Dr. George T. Harrison, said: if one does not use collargol in these severe forms of infection, one has not done his duty. I have saved cases with it that I could not have cured in any other way. When intravenous injection can not be employed, collargol should be given by inunction or per rectum.

Dr. Charles S. Rockhill, Cincinnati, in the *Woman's Medical Journal*, March, 1908, on the Medical Treatment of Cholelithiasis," says it has been shown that a large portion of salicylic acid, given by mouth, passes into the bile, inhibits putrefactive processes and disinfects that secretion. Salicylic acid also has a powerful cholagogue action, producing a thin bile deficient in solids. It, therefore, seems to be ideal in its action, for it attacks the two most important etiological factors of gallstones,—infection and stagnation. Bauermeister has proposed a combination of salicylic acid, sodium oleate, menthol and phenolphthalein,

the probilin pills. Dr. Rockhill has had experience therewith, and details the following case:

Mrs. P., aged 41, married. Had four children and was pregnant at the time I was called, June 21. I found her in great pain, temperature subnormal, with cold perspiration, some icterus, nausea and vomiting. Has had similar attacks.

I gave her a hypodermic injection of morphine, applied Priesnitz compresses, and washed out the stomach with hot Carsbad water. The symptoms subsided, and I discharged the patient with the usual instructions as to taking Carsbad salts, exercise, and the like. About two weeks later I was again called and found the same train of symptoms. In the mean time I had been advised to use probilin and concluded to try it in this case. After properly cleansing the bowels, I started with three pills morning and evening, increasing each dose one pill every second day until fourteen pills were taken daily for a period of three weeks. Then I gradually diminished the number, the treatment lasting three months. The patient had one attack, not as severe, shortly after she started the medication. Since then she has been well and free from all symptoms.

Dr. Rockhill has had three other cases that yielded in a similar manner, under the same treatment, as well as one patient who would not follow instructions, was operated upon and succumbed probably to a peritonitis.

Dr. Paul Cohnheim, Berlin, in his "Diseases of the Digestive Tract" (*Karger*, Berlin, 1908,) mentions, in the treatment of cholelithiasis, the use of probilin, three or four pills with one-third to one-half liter of very warm water twice daily, adding: "only when internal therapy has been exhausted, and when severe attacks occur again and again, should the patient be referred to the surgeon."

THE TREATMENT OF CYSTITIS.—Dr. Josef Bodenstein, Selzthal, (*Deut. Med. Presse*, No. 24, 1907,) reports that in 32 male and female cases of cystitis he gave arhovin (1 or 2 capsules 3 to 6 times daily) and an infusion of equal parts of herba herniariæ and herba chenopodium ambrosiadis ($\frac{1}{4}$ to $\frac{3}{4}$ quart at each dose). Only in 4 of his 32 cases was the support of local treatment necessary. The results were brilliant; in 8 to 35 days most of the cases were cured or exhibited striking improvement. Within 1 to 3 days pain and tenesmus diminished and even urinary retention was favorably influenced. In 3 cases, catheterisation, previously required, could be discontinued after a few days of arhovin medication. Urine with thick sediment of pus and mucus sometimes became entirely clear within 8 to 14 days; with the amelioration of the bladder difficulties the fever often

disappeared on the second or third day; appetite improved and intestinal irregularity ceased without any other measures. The effect, curative and analgesic, was astonishing because of its promptness, certainty and intensity.

Dr. M. A. Fechheimer, of Detroit, writing on "The Treatment of Chronic Gonorrhea," (*Detroit Medical Journal*, March, 1908), says: "Arhovin is useful in those cases where there appears to be an irritation of the prostatic urethra, and acts in a very beneficial manner."

HEMORRHOIDS.

Zweig, of Vienna, says in the chapter on hemorrhoids of his "Therapie der Magen und Darmkrankheiten" (Urban & Schwarzenberg, 1907): "The anusol suppositories have been found very useful by me; they are a compound of bismuth with iodised resorcin-sulphoniacid, and are introduced daily after the morning defecation and at night before retiring."

EXODIN.

George M. Gould's "American Year-book of Medicine and Surgery," 1905, brings in the chapter of materia medica an abstract of Ebstein's report on exodin, according to which it stands midway between the laxatives and purgatives and produces mushy stools without interfering with the digestion or causing colic. The editors of the department, R. W. Wilcox and A. A. Stevens, add. "We have found this substance to fulfill well the claims made for it."

Chronic Constipation in Children.—H. B. Sheffield, M. D., Instructor in Diseases of Children and Attending Pediatrist (O.P.D.) Post-Graduate Medical School and Hospital; Visiting Pediatrist to the Metropolitan Hospital and Dispensary, etc., New York, writes in a paper (*Archives of Pediatrics*, Nov., 1905): "Of the more recently recommended cathartics, I found exodin to act splendidly. It is tasteless and, therefore, readily taken by the little patients, either in apple sauce, syrup of acacia or in tablets. Three to 10 grains produce a soft movement without any gastrointestinal disturbance."

In *American Medicine* of May 6, 1905, the department of "Treatment," edited by Drs. S. Solis Cohen, L. F. Appleman and F. Lindauer, comments on exodin as follows: "This is a most satisfactory laxative for palliative use in cases of chronic constipation until massage and electricity have established normal peristalsis without drugs. It gives soft stools without straining. The dose is from 0.5 gm. to 1.5 gm. once or twice daily."

In discussing purgation before and after abdominal operations, H. J. Boldt, said: "I have for a couple of years resorted to giving in very many instances a cathartic perhaps half an hour before operation, and, as a rule, would have the desired effect within 24 hours. The cathartic which has given more satisfaction than any other is a preparation called exodin, which seems to have a better effect in this way: it does not cause griping and produces normal evacuation in from 20 to 24 hours after administration. Then we have the effect following the operation."—*Trans. So. Surg. and Gyn. Assn.*, 1904.

In Professor Schwalbe's *Jahrbuch der Praktischen Medicin*, 1905, Prof. M. Cloetta, of Leipzig, reviews the reports that have been published on exodin and expresses his own opinion on the remedy as follows: "It is a fact that the use of exodin is not attended by any symptoms of irritation; the passages follow without disturbances of any kind and are in the nature of normal evacuations."

PYRENOL IN PERTUSSIS AND ASTHMA.—Eulenbarg's "Encyclopädische Jahrbücher der gesamten Heilkunde," 1906, says regarding pyrenol: "It continues to demonstrate its trustworthiness, especially in bronchial asthma and pertussis. It prevents pulmonary complications and loosens expectoration, as for instance in bronchial catarrh. In angina pectoris it exercises a sedative effect. It can be used in phthisis cases, but it may be well to avoid it if hemoptysis threatens."

PYRENOL IN CROUPOUS PNEUMONIA.—Keiner (*Münch. Med. Woch.*, July 24, 1906.) says that in the Dortmund Municipal Hospital pyrenol was found to be the most effective of all the remedies for croupous pneumonia. Cases admitted on the third and fourth days of the disease ran a prompt course when pyrenol in $7\frac{1}{2}$ -grain doses was given every two or three hours. He has been favorably impressed by its therapeutic efficacy and is convinced of its pertinency and harmlessness.

UROTROPIN IN CONVALESCENCE FROM TYPHOID.—Frederick C. Shattuck, Jackson Professor of Clinical Medicine in Harvard University, says in a paper on "The Value of Drugs in Therapeutics" (*Bost. Med. and Surg. Journ.*, March 29, 1906,) that some useful synthetic compounds have been discovered and more will be discovered. Who can count the number of cases of typhoid which have originated through the urine of a previous patient? This is a danger against which urotropin, rightly used, seems to

afford absolute protection. For the past eight years his patients have all had 7 to 10 grains of urotropin thrice daily, two successive days of each week, until convalescence was complete. In no case has harm resulted. Were the practice universal, there would be less typhoid, the prevalence of which is a reproach to our civilisation.

ABSTRACTS.

Early Prostatectomy.

MILES F. PORTER, Fort Wayne, Ind. (*Journal A. M. A.*, May 23), pleads for early prostatectomy in cases of prostatic hypertrophy requiring operation. In the analysis of 485 recorded cases, occurring in the surgical practice of thirteen different operators, he finds a total death rate of less than 7 per cent., while the death rate of the operation itself is less than 2 per cent., and the death rate from conditions secondary to and caused by the enlarged prostate is 3.5 per cent. In other words, half of all the deaths following prostatectomy are due to the diseased condition and outnumber those from the operation *per se* two to one. This means that the death rate in hypertrophy of the prostate treated without operation is about 4 per cent., while timely prostatectomy will yield a death rate of 2 per cent. or less. If there is any error here, he says, it is in attributing too many deaths to the operation and charging too few to pathologic conditions. Turning next to the post-operative morbidity, he finds urinary incontinence, stricture and fistula very exceptional results: Fuller, in 400 cases, has had but one permanent urinary dribbling. Barling, Hartmann, McGill, Lilienthal and Freyer are of the opinion that control of the bladder is not interfered with by prostatectomy, but, on the contrary, is often restored. For obvious reasons, exact statistics as to the effect of prostatectomy on the sexual functions are difficult to obtain, and Porter thought the best way to obtain a just estimate would be to get the statement from a number of operators of experience as to their impressions derived from their patient's testimony on this point. The answers to his inquiries, which are given in his article would seem to indicate that the results have been generally satisfactory to the patients. Of course prostatectomy will not restore senile incapacity. His personal experience is limited to 25 cases. There were three deaths due to preëxisting septic conditions for which operative relief was demanded. There were no postoperative sequelæ, and he knows of no operation that gives more general and complete satisfaction to the sufferers. That malignant disease

is present in a much larger proportion of cases than has been supposed, is proved by the experience of Young, the Mayos, Vander Veer, Monro, Bottomley and others, and that a benign hypertrophy may become malignant, appears, from the evidence, a well-nigh proved fact. Porter concludes, from all the data, that since catheter treatment is unsurgical and unsafe, prostatectomy, performed before secondary changes have occurred, is the best treatment for enlarged prostate.

PREVENTION OF CYSTITIS.

PROFESSOR HOWARD A. KELLY in his "Medical Gynecology" (*Appleton & Co.*, New York, 1908), regarding the prevention of cystitis says: when the physician finds it is going to be necessary to catheterise his patient during convalescence, as after a severe confinement, one of the best prophylactic agents is the use of urotropin, say 10 grains thrice a day till danger of infection is over. Urotropin has its best field as a preventive in such cases and as an indispensable adjuvant in fresh infections. It is less effective in old cases. It seems to have more effect on the colon bacillus than on any other organism. It is useless in tuberculosis and probably most effective in cystitis and pyelitis following typhoid. In surgical cases prophylaxis can do a great deal to prevent cystitis following, and complicating convalescence.

In existing cystitis, urotropin (5 grains every 3 or 4 hours) should be given for some days at the beginning. If this makes the urine more irritating, the dose should be lessened or suspended.

TOPICS OF PUBLIC INTEREST.

The Antituberculosis Crusade at the County Fairs.

"Every thirty-six minutes there is a death from consumption in the State of New York," so read several charts of the tuberculosis exhibitions of the State Charities Aid Association, which are to be shown at thirty-six of the county fairs of this state during the coming fall. To many this is a bit of news at once surprising and startling. The great majority of people have no conception of the awful ravages of this disease, of that sorrow, suffering, misery, destitution and squalor that are left in the trail of the "Great White Plague," more profound still is the ignorance of the nature of the disease. Believing and regarding it as hereditary and incurable, humanity has from time immemorial suffered tuberculosis to rage unchecked, but now however, thanks to science, it has been known for some twenty

years that this plague is not only not hereditary, but that it is curable in the early stages, and most important of all, that it is preventable, perhaps more so than any other germ disease.

To disseminate our present day knowledge of the means and methods for checking and securing a control over this scourge, an educational campaign was carried on in nine cities of this state, during the past year. But the people living in the country should get the message also, to them should be imparted our information about the disease, for though it is not generally known that in the small towns and rural districts of this state tuberculosis is almost as prevalent in proportion to the population, as it is in the large cities, still such is the case, however, as has been determined from an examination of the vital statistics of all the towns and villages of the state.

The county fair offer a splendid opportunity of reaching the people of the rural districts, and of bringing home to them the essential facts about this disease, its nature, its extent, how it spreads, how it may be cured and prevented. Over 400,000 people, it is expected, will hear the gospel of the antituberculosis crusade.

Each exhibit will be made up of maps, charts, diagrams, models of well lighted and ventilated factories, together with models of sweat shop work-rooms, and dark poorly ventilated bedrooms where the consumption germ finds an excellent breeding place. Pictures of dispensaries, hospitals, and sanatoria where consumptives are treated, radiographs and photographs of healthy and diseased lungs will be shown. Scores of short terse pointed texts will be displayed about the exhibit.

Nothing gruesome or objectionable has been allowed to creep into the exhibits, so no one need stay away on that account. The tone throughout is optimistic for it has been felt that in a great, tremendous campaign like this, the greatest perhaps that ever has or ever will be carried on by preventive medicine, optimism is a prime requisite.

UNUSUAL CARDIAC MURMURS.—Richard Ellis, of New York, (*Medical Record*, July 25, 1908,) gives twenty-one cases in healthy persons in whom there were cardiac murmurs, in many cases causing them to be rejected by life insurance companies, while no organic lesions of the heart could be discovered by the author. Several of these were double murmurs synchronous with respiration and caused in some way by the act.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

All communications, whether of a literary or business nature, books for review and exchanges, should be addressed to the editor 238 DELAWARE AVE., BUFFALO, N. Y

VOL. LXIV.

SEPTEMBER, 1908.

No. 2

Industrial and Personal Hygiene.

PRESIDENT ROOSEVELT has demonstrated many times his concern for the welfare of the people, and especially his interest in the prevention of disease through the establishment of efficient sanitary measures. Perhaps one of the most conspicuous instances in which he has manifested this concern is in the establishment of what is known as "The President's Homes Commission," consisting of fifteen men and women,—to be exact, thirteen men and two women,—more or less noted for their philanthropic proclivities and scientific knowledge.

At the head of this commission stands the name of Brigadier General George M. Sternberg, Surgeon General United States Army, retired, whose work on the lines of preventive medicine is conspicuous. The secretary is Dr. George M. Kober, professor of hygiene at Georgetown University, also noted as a scientific man. Dr. Kober also is chairman of the committee on Social Betterment, a subcommittee of the commission, and his committee has issued recently a report on industrial and personal hygiene that possesses great interest and which becomes of importance in the study of problems connected with these topics. The report is a standard octavo brochure of 175 pages, printed on soft white paper, and is well indexed.

About 100 pages of the report are devoted to the consideration of industrial hygiene in which the morbidity and mortality of wage-earners are dealt with in considerable detail, and statistics, taken from the census reports and elsewhere, are offered in support of the statements made. It is shown that many persons are engaged in occupations for which they are not physically fitted, while others ruin their health by vice, dissipation, improper food and insanitary home environment.

Curiously enough, an example is cited for which neither industry nor the individuals are to blame—namely, the anemia of the agricultural classes in Porto Rico, which, a few years ago, was attributed to their occupation and starvation, but it has been discovered recently that it was caused by the hookworm disease. The dust inhaling occupations, as is well known, cause or contribute to irritating diseases of the respiratory tract. The bearing of elevator dust in causing diseases of the air passages was worked out many years ago by Dr. Thomas F. Rochester, of Buffalo. Since that time it has become known that many other dust particles, habitually inhaled, cause respiratory diseases. Workers in metallic and mineral dust industries are specially liable to diseases of the throat and lungs.

All these and many other dangers such as vegetable dust, the dust from textile industries, animal dust, the infective matter in dust from rag, paper, wool and hair industries and lead dust are pointed out and dealt with in an intelligent and comprehensive manner. Special measures for the prevention of disease among wage-earners and for their protection are considered, as well as the sanitation of workshops and quarters for employees, the latter involving cubic air space, ventilation, temperature, humidity, lighting, while the prevention of spitting and many miscellaneous sanitary provisions are dealt with.

As bearing on the further question of prevention the report considers what the federal government may do for the promotion of the welfare of its employees; what the employer may do; what the general public may do; and, finally, what the employee may do to contribute to his own welfare.

The second part of the report deals with personal hygiene, in which questions relating to house and home, baths, clothing and arrangement of dress, undergarments, footwear, the teeth and the care of the special organs are treated of. The report advises that deep breathing in the open air or near an open window, by taking ten or twelve deep inspirations morning and evening, should be practised, which is believed to secure the thorough ventilation of all the air vesicles. In an appendix the health of employees in the government printing office at Washington is considered by Dr. William J. Manning, chief of the sanitary division of that office. An illustration of the Emergency Hospital in the government printing office is given.

The report as a whole is of an excellent nature, has been prepared with great care, and cannot fail to exert a useful influence over employer, employee, and the general public. It is to be hoped that it will be distributed at least very extensively to those employers, who have large numbers of wage-earners in charge.

New York Post-Graduate Medical School and Hospital

IN celebration of the twenty-fifth anniversary of the founding of this, the first institution for the teaching of graduates in medicine established in this country, the faculty has issued a volume entitled, *Contributions to the Science of Medicine and Surgery*. It is an imperial octavo volume of 485 pages, printed on calendered deckle-edged paper, with wide margins and bound in illuminated dark green paper:

An introduction to the book is a biographical sketch of Dr. Daniel Bennett St. John Roosa, the founder of the school and president of the faculty from the beginning. A full-page etching of Dr. Roosa, in portrait, constitutes an imposing frontispiece. The sketch of his life is written by Dr. Charles L. Dana and is a concise history of the busy life of this remarkable man. In the course of the sketch Dr. Dana quotes from the article written by Dr. Maurice J. Lewi, secretary of the state board of medical examiners, published in the *Post-Graduate* last April, in which Dr. Lewi said:

Ever fighting for higher standards, ever striving to advance the interests of the profession, always on the alert for methods and means of inciting the ambition of those teaching the student body, he was a welcome addition to all councils where these points were under advisement.

As indicative of the multitudinous topics which engaged Dr. Roosa's attention and which in turn were presented to the legislature of the state of New York, either directly by him or through the committee of which he was chairman, (see reports Committee on Legislature, 1890 and 1891, *Transactions of the Medical Society of the State of New York*), the following may be quoted:

1. The transfer of the chronic insane from county asylums to state institutions.
2. "An act to prevent blindness."
3. The regulation and the control of the embalming process.
4. Advancing the standard of academic requirements for all persons entering upon a career of medicine.
5. Safeguarding the interests of the New York state medical practitioners as against practitioners resident in other states, desirous of being admitted to practise in New York state.

Dr. Roosa ceased his official connection with the state society many years ago, but his interest in the welfare of the medical profession never lagged. He was ever ready to come to the rescue when danger threatened, and many a time, at a personal loss of income from his large practice, he went to Albany and to even greater distances to exert his voice and efforts for or against measures which had a bearing upon the well-being of medical practice.

In the biographic sketch Dr. Dana points out that Dr. Roosa was noted for his skill and leadership in the topics of his specialties, ophthalmology and otology, to his success as a teacher, and for his activity in advancing the interest of medical education.

The body of the volume consists of forty-seven selected papers written by as many members of the faculty and which constitute a distinct contribution to the science of medicine and surgery. The book is a great credit to those concerned, not excepting the editor, Dr. Henry T. Brooks.

A Clean Milk Exhibit at the International Congress on Tuberculosis.

PREPARATIONS are being made by the New York Committee of the International Congress on Tuberculosis to include a Clean Milk Exhibit during the three weeks of the Tuberculosis Exhibition at Washington, from September 21, to October 12, 1908.

The coöperation of a number of public-spirited dairy owners, including Mr. W. W. Law, Jr., Hon. Seth Low, and Mr. V. Everit Macy has been obtained, as also of Commissioner Pearson, Commissioner of Agriculture, Professor Moore, Pathologist, State Veterinary College and Professor W. A. Stocking, Jr., Bacteriologist, Cornell University. It will include not only photographs of dairies, statistical charts and Petri plates of bacteriology of milk and illustrations of tuberculin tests for cattle, but will also have a small working dairy with tuberculin tested cow, skilled attendant, sanitary utensils, shipping cases and all sanitary appliances for the marketing of a clean milk. There will be printed on cardboard a series of aphorisms regarding clean milk. There will be represented graphically the food value of milk as compared with other foods, prepared by the State Department of Agriculture, illustrating the general source of infection of milk with tuberculosis, are being prepared under the supervision of Mr. Law, Jr.

In view of the fact that Mr. Nathan Straus is preparing for the exhibition a duplicate of the pasteurisation plants already erected by him in Heidelberg, Brussels and Berlin, the exhibition at Washington, will afford an excellent opportunity for a comparative study of the two methods of marketing milk: (1) Pasteurised; (2) unpasteurised but clean.

HEALTH COMMISSIONER WENDE has appointed five doctors as medical examiners for the public schools in Buffalo, whose names are as follows: Dr. Arthur C. Schafer, 753 Michigan street, heading the eligible list; Dr. Franklin W. Burrows, 1236

Michigan street; Dr. Daniel V. McClure, 709 Elk street; Dr. William C. Callanan, 292 Niagara street, and Dr. David E. Wheeler, 391 Delaware avenue.

The appointments were all from the eligible list of the Civil Service Commission and took effect August 16. Dr. Callanan will have charge of the parochial schools.

Miss Rose O'Hara, 146 Rhode Island street, has been appointed a school nurse and will look after pupils discharged from school by the medical examiners and also will see that the physicians' directions are carefully observed. Miss O'Hara's name stood at the head of the civil service eligible list.

IN the Philippines the army is to conduct a test of the use of underclothing of suitable color to protect the troops against the actinic ray. While the effects of the sun in the Philippines and in the hotter portions of India are said to differ materially, it is believed that it would be wise to have a careful investigation made as to the advantages to be derived from the use of underclothing of a color to protect against this ray. Accordingly, the depot quartermaster at Philadelphia, is now having prepared 5,000 suits of underclothing and as many hat linings of an orange red color. They will be shipped to the Philippines, where careful observation will be made to ascertain to what extent color can be depended on as a protection for troops against actinic rays.

ACCORDING to *The Medical Press and Circular* a red nose is by no means a sign of drunkenness, and is as common among teetotallers as tipplers. Indigestion is responsible almost more than anything else for red noses, while excessive tea drinking is apt to play havoc with the complexion in general and with the nose in particular. Sometimes the congested nose is a sign of some serious disorder of the heart, or it may point to a sluggish circulation. The habit of inhaling cigaret smoke and puffing it through the nostrils may contribute to the external wealth of color.

THE report that carbolic acid is the most frequently used agent for committing suicide provokes double wonder,—that people choose so unpleasant an instrument and that some means cannot be devised for making it less easy for anybody to procure the poison. At present it seems to be no more difficult to buy that deadly drug than to get so much sugar or salt.

THE Kaiser, according to a recent cable from Berlin, has subscribed \$25,000 to the fund for the Koch Institute for combating

tuberculosis. This makes up the \$250,000 that it was necessary to procure to obtain the \$125,000 promised by Andrew Carnegie.

PERSONAL.

DR. JANE WALL CARROLL, of Buffalo, was elected president of the medical section of the National Fraternal Congress, recently convened at Put in Bay, Ohio.

DR. HOWARD J. ROGERS, of Albany, first assistant commissioner of education of the State of New York, according to an Associated Press despatch of August 22, 1908, has resigned his office to devote his time to mining interests in the west. Dr. Rogers was in charge of universities, colleges, professional and technical schools, and the execution of the laws concerning the profession, also the relations and chartering of higher institutions. His resignation will be greatly regretted by all who had occasion to meet him officially, as well as by a large circle of personal friends.

DR. CARL G. LEO-WOLF, of Niagara Falls, has returned from a two months' trip abroad, and has resumed his professional practice.

DR. L. BRADLEY DORR, of Buffalo, has been nominated for Congress by the 35th congressional district republican convention. Dr. Dorr is one of the prominent practitioners in this city and would represent the district with credit should the nomination be ratified at the polls.

DR. CARL S. TOMPKINS, of Randolph, N. Y., has taken apartments in the Jupp apartment house, corner Allen street, and Elmwood avenue, Buffalo, which he and Mrs. Tompkins will occupy after the first of September.

DR. JAMES L. GALLAGHER, one of the staff physicians of the Emergency Hospital, Buffalo, has been elected supreme medical examiner of the Ancient Order of Foresters of the High Court of the United States.

OBITUARY

DR. GEORGE MICHAEL EDEBOHLS, of New York, died at his home in that city August 8, 1908, from Hodgkin's disease after an

illness of four months, aged 55 years. Dr. Edebohls graduated in medicine from the College of Physicians and Surgeons, now the medical department of Columbia University, in 1875. He became distinguished for his gynecological work, and rose to prominence in several medical societies. At the time of his death he was professor of diseases of women at the New York Post-Graduate Medical School and Hospital; attending gynecologist to Saint Francis and the Post-Graduate Hospitals; and consulting gynecologist to Saint John's Hospital, Yonkers, and to Nyack Hospital. He attained fame as an abdominal surgeon, his most conspicuous recent achievement being the operation of decapsulation of the kidney for the relief of nephritis.

SOCIETY MEETINGS.

THE International Congress on Tuberculosis will be held at Washington, beginning September 21, 1908, and continuing until October 12, covering a period of three weeks. The following is a list of special lectures to be delivered and papers to be read in connection with the Congress.

LIST OF SPECIAL LECTURES.

In connection with the congress a series of special lectures will be delivered in Washington and elsewhere by eminent foreigners. The names of the speakers, and the cities in which they will lecture follow:

Bernard Bang, of Copenhagen, Washington, October 3. Subject: "Studies in Tuberculosis in Domestic Animals and what we may Learn regarding Human Tuberculosis."

A. Calmette, of Lille, France; Philadelphia, September 26. Subject: "Les nouveaux proceds de diagnostic precoce de la Tuberculosis."

Emil Coni, of Buenos Ayres; Washington, October 2. Subject: "La Lucha contra Tuberculosis en la Republica Argentina."

Arthur Newsholme, of Brighton; Washington, September 29. Subject: "The causes which have lead to the past decline in the death-rate from Tuberculosis and the light thrown by this history on Preventive Action for the Future."

Gothhold Pannwitz, of Berlin; Philadelphia, September 24. Subject: "Social Life and Tuberculosis."

R. W. Philip, Edinburg; Boston, October 6. Subject: "The Antituberculosis Program—Coördination of Preventive Measures."

C. H. Spronck, of Utrecht; Boston, October 7.

Andres Martinez Vargas, of Barcelona; New York, October 9. Subject: "Tuberculosis of the Heart, Blood and Lymph Vessels."

Theodore Williams, of London; Philadelphia, September 25. Subject: "The Evolution of the Treatment of Pulmonary Tuberculosis."

Dr. Maurice Letulle and M. Augustin Rey. (joint lecture); Washington, September 30. Subject: "La Lutte Contra la tuberculose dans les grandes villes par l'Habitation; methodes scientifiques modernes pour sa construction."

Dr. L. Landouzy, of Paris; Baltimore, October 5.

Dr. A. A. Wladimiroff, of St. Petersburg; Washington, September 28. Subject: "Biology of the Bacillus."

Prof. N. Ph. Tendeloo, of Leiden. Subject: "Collateral Tuberculosis Inflammation."

Titles of Papers for Section I.

Dr. William H. Welch, president. (Includes titles received up to August 13.)

Milton J. Rosenau, Washington, D. C. "The viability of the tubercle bacillus."

Victor C. Vaughan, Ann Arbor, Mich. "A study of the proteids of the tubercle bacillus."

John Weinzerl, Seattle, Wash. "The action of diffuse light upon bacillus tuberculosis."

Dwight M. Lewis, New Haven, Conn. "The morphology of the tubercle bacillus."

S. Arloing and Paul Courmont, Lyons, France. "Nouvelles Cultures Homogenes des bacilles de la Tuberculose."

J. N. Davalos and J. Cartaya, Havana, Cuba. "Comparative study of the tubercle bacillus of human and of bovine origin."

A. Rodet, Montpellier, France. "La Virulence du bacille dans ses rapports avec l'evolution clinique de la tuberculose pulmonaire."

A Parker Hitchens, Glen Olden, Pa. "A chamber in which dried tubercle bacilli may be handled without danger."

N. Ph. Tendeloo, Leiden, Holland. "Channels of infection."

Julius Bartel, Vienna, Austria. "Uber Eintrittspforten der Tuberkulose."

G. Kuss, Angicourt, France. "Sources et voies d'infection de la contagion tuberculeuse."

S. Bernheim, Paris. "Les portes d'entree de la tuberculose."

S. Bernheim, Paris. "Rapports de l'air avec la contagion tuberculeuse. Sterilisation de l'air."

Alfred F. Hess, New York. "A study of the tuberculous contamination of New York City milk."

Jules Courmont and A. Lesieur, Lyons, France. "Inoculation transcutanee de la tuberculose."

Julius Bartel, Vienna. "Immunisirungsversuche gegen Tuberculose."

Jules Courmont and A. Lesieur, Lyons. "Contribution a l'immunité dans la tuberculose."

A. B. Marfan, Paris. "Immunité de l'homme pour la tuberculose."

Y. Ishigami, Osaka, Japan. "Tuberculo-toxoidin and immunisation serum."

Eugene L. Opie, New York. "The part of enzymes in tuberculous lesions."

Aldred S. Warthin, Ann Arbor, Mich. "The frequency of healed tuberculosis of the mesenteric glands, with particular reference to the relationship between hyaline deposits in these glands and the healing of tuberculous lesions."

S. Arloing, Lyons, France. "De l'infection tuberculeuse d'après le criterium anatomo-pathologique."

John McCrae, Montreal, Canada. "Analysis of 1,000 consecutive autopsies in Montreal with reference to the incidence of tuberculosis in the different organs."

A. R. Landry, Montreal, Canada. "Incidence of chronic pleurisy in 1,400 autopsies in Montreal, and its relationship to tuberculosis."

Leon Barnard, Paris. "Etude anatomique et pathologique des lesions non-folliculaires de la tuberculose."

R. Tripier, Lyons. "De la pneumonie dans le processus de la tuberculose pulmonaire."

J. Paviot, Lyons. "Processus anatomique de l'hémorrhagie dans la tuberculose au debut."

Joseph Walsh and C. M. Montgomery, Philadelphia. "The kidneys in tuberculosis of the lungs."

D. J. McCarthy, Philadelphia. "Tuberculosis of the spinal meninges, with a consideration of the mode of infection of these structures."

J. T. Ullon, Philadelphia. "The liver in tuberculosis."

Walter Altschul, Prague, Austria. "Zur pathologie der Peritoneal-tuberculose."

Charles Esmonet, Puy de Dom. "De la tuberculose experimentale du testicule."

O. Amrein, Arosa, Switzerland. "Periostitis et adipositis tuberculosa toxica multiplex."

Paul Courmont, Lyons. "Proprietes humorales des exsudats tuberculeux, valeur, pronostique et therapeutique."

Camillo Calleja, Valladolid, Spain.

Alfred C. Crofton, Chicago. "An experimental and clinical study of the calcium metabolism in tuberculosis."

THE American Association of Obstetricians and Gynecologists will hold its twenty-first annual meeting at the Hotel Belvedere, Chase and Charles Streets, Baltimore, Md., Tuesday, Wednesday and Thursday, September 22, 23 and 24, 1908, under the presidency of Dr. E. Gustav Zinke, of Cincinnati. Drs. W. A. B. Sellman (chairman), Joseph H. Branham, and William S. Smith, of Baltimore, constitute the committee of arrangements. Dr. Sellman, whose address is No. 5 East Biddle street, should be communicated with regarding the reservation of rooms at the Belvedere, as well as covers at the banquet.

THE Mississippi Valley Medical Association will hold its (34th) annual meeting at The Seelbach Hotel, Louisville, Tuesday, Wednesday and Thursday, October 13, 14 and 15, 1908, under the presidency of Arthur R. Elliott, of Chicago. An extensive preliminary program has been issued and a large attendance is expected. Henry Enos Tuley, 111 W. Kentucky street, Louisville, is the secretary, who should be addressed concerning the affairs of the meeting.

COLLEGE AND HOSPITAL NOTE

THE Medical Department of the University of Buffalo will begin its Sixty-third annual session, Monday, September 28, 1908. The opening lecture will be delivered by Dr. Julius Ullman, instructor in clinical medicine, at Alumni Hall in the University building, at 8 o'clock p. m. A general invitation to the profession to attend is extended by the faculty.

BOOKS AND AUTHORS.

Modern Medicine. Its Theory and Practice. Edited by **William Osler**, M.D., Regius Professor of Medicine in Oxford University, Eng. Assisted by Thomas McCrea, M.D., Associate Professor of Medicine and Clinical Therapeutics in Johns Hopkins University, Baltimore. In seven octavo volumes of about 900 pages each, illustrated. Volume IV. Lea & Febiger: Philadelphia and New York, 1908. (Cloth, \$6.00, leather, \$7.00, half morocco, \$7.50 net.)

The contents of this volume include diseases of the circulatory system, diseases of the blood, and diseases of the spleen, thymus, and lymphatic glands. These topics are of particular interest to clinicians and are set forth by men of capability. The first part, dealing with diseases of the circulatory system, constitutes about

two-thirds of the book, and is an exhaustive presentation of the subject. Less than one hundred and fifty pages are allotted to diseases of the blood, though the more important features relating to this topic are taken up. About one hundred pages are devoted to the consideration of diseases of the spleen, thymus and lymph glands. The chapter relating to the spleen is prepared by Irving Phillips Lyon of Buffalo, and is a careful résumé of the literature of the subject. The other chapters in this section—diseases of the thymus, and diseases of the lymphatic glands—are supplied by Alfred Scott Warthin, of Ann Arbor, and these chapters also present the latest knowledge on the subjects dealt with.

This volume is replete with valuable material and stands well up to the level of the previous numbers of the series. We are at a loss, however, to understand why the editor permits the contributors habitually to end sentences with the abbreviation "etc."—or again to use the abbreviation viz. for "namely"—or still again to make use of diphthongs. These incongruities serve to mar, every now and then, what otherwise would be a most perfect page.

Medical Gynecology. By **Samuel Wyllis Bandler**, M.D., Adjunct professor of diseases of women, New York Post-Graduate Medical School and Hospital; associate attending gynecologist to the Beth Israel Hospital, New York. Octavo, pp. 676. With original illustrations. Philadelphia and London: W. B. Saunders Co. 1908. (Cloth, \$5.00).

Many attempts have been made in recent years to deal with gynecology from the medical point of view, that is to say, to publish a treatise on gynecology from the non-surgical side of the subject. Some of the works have presented the topic with a reasonable success, but in general they have failed to obtain the confidence of the profession and have passed from view.

This work is the product of the author's clinical experience as a teacher and is a practical application thereof to the needs of the every-day practitioner. The author's directions for examination are thoroughly scientific in character and, besides, are so well illustrated that even the novitiate may thereby learn the technic. So, too, with the methods employed by Bandler in medical treatment, the description of which occupies the second section of the book. The employment of pessaries in appropriate conditions will ever be a topic of interest, because to oppose a mechanical device against a mechanical defect involves an interesting principle,—one quite as applicable to the human body as elsewhere. The author is particular in his directions for the employment of pessaries, felicitous in his descriptions as to their introduction, and the illustrations give clearness as to his meaning.

The causes and treatment of erosions of the cervix of inflammatory conditions of the genital tract, and of the endometrium,

of pelvic peritonitis, and subinvolution all receive due attention. The several phases of uterine displacements are dealt with in an interesting and instructive manner. Some of the topics need elaboration which doubtless will be done in a subsequent edition, but taken as a whole the book presents the subject of medical gynecology to the general practitioner in a more satisfactory fashion than has been done by any previous work that has come within our view.

The Development of Ophthalmology in America, 1800-1870. A Contribution to Ophthalmic History and Biography. An address delivered in abstract before the section of ophthalmology of the American Medical Association, June 4, 1907. Revised and enlarged. By **Alvin A. Hubbell**, M.D., Ph.D., Professor of Clinical Ophthalmology in the University of Buffalo, etc. Duodecimo, pp. 197. Illustrated by selected portraits and cuts. Chicago: W. T. Keener & Company. (Cloth, \$1.75 net.)

Dr. Hubbell, who for many years has been numbered among the prominent ophthalmologists of Buffalo, has performed a distinct service to medicine and medical men in presenting this historic sketch. Medical history, always interesting, is doubly so when one knows the historian, as in the present instance. It is of special importance that younger members of the profession should become familiar with American medical history. The topic of ophthalmology has been prepared by this author with painstaking care, reflecting credit alike to subject and historian. It is to be noted, in particular, that the book is embellished by portraits and cuts of institutions, thus giving an increased value and a more substantial character. Let us hope that the history of other medical specialties will be prepared by as competent historians and made as interesting.

BOOKS RECEIVED.

The Principles and Practice of Gynecology. By E. C. Dudley, Professor of Gynecology in the Northwestern University Medical School. Chicago. Fifth edition. Octavo, pp. 806. With 431 illustrations and 20 full page plates. Philadelphia and New York: Lea & Febiger. (Cloth. \$5.00; leather, \$6.00; half morocco, \$6.50, net prices).

Pulsating Exophthalmos. By George E. de Schweinitz, M.D., Professor of Ophthalmology in the University of Pennsylvania, and Thomas B. Holloway, M.D., Instructor in Ophthalmology. Small octavo. p. 124. Philadelphia and London: W. B. Saunders Co. (Cloth, \$2.00).

Pain. Its Causation and Diagnostic Significance in Internal Diseases. By Dr. Rudolph Schmidt, Assistant in the Clinic of Hofrat von Neusser, Vienna. Translated by Karl M. Vogel and Hans Kinsner, College of Physicians and Surgeons, New York. 12mo, pp. 326. Philadelphia and London: J. B. Lippincott Co. (Cloth. \$3.00).

Cataract Extraction. A Series of Papers with discussions read before the Ophthalmological Section of the New York Academy of Medicine, 1907-1908. Edited by J. Herbert Claiborne, M.D., Instructor in Ophthalmology, Cornell University Medical College. Small octavo, pp. 169. New York: William Wood & Co. (Cloth, \$2.00.)

Pathological Technic. By Frank Burr Mallory, M.D., and James Homer Wright, M.D., Assistant Professors of Pathology, Harvard University Medical School. Fourth edition. Octavo, pp. 480. Illustrated. Philadelphia and London: W. B. Saunders Co. (Cloth, \$3.00.)

Diseases of Infancy and Childhood. By Louis Fischer, M.D., Attending Physician to the Willard Parker and Riverside Hospitals. New York. Second edition. Octavo, pp. 979. With 403 illustrations, several in colors, and 27 full page half-tone and color plates. Philadelphia: F. A. Davis Co.

The Ready-Reference Handbook of Diseases of the Skin. By George Thomas Jackson, M.D., Chief of Clinic and Instructor in Dermatology, College of Physicians and Surgeons, New York. Sixth edition. 12mo, 737 pages, with 99 engravings and 4 plates, in colors, and monochrome. Lea & Febiger, Publishers, Philadelphia and New York, 1908. Cloth. \$3.00, net.

The Principles of Pathology. Volume I., General Pathology. By J. George Adami, M.A., M.D., LL.D., F.R.S., Professor of Pathology in McGill University, Montreal. Octavo, 948 pages with 322 engravings and 16 plates. Lea & Febiger, Publishers. Philadelphia and New York, 1908. (Cloth, \$6.00 net.)

Consumption: How to Prevent it and How to Live With It. By N. S. Davis, A.M., M.D., Professor of Principles and Practice of Medicine, Northwestern University Medical School, Chicago. Second edition. 12mo. 172 pages. F. A. Davis Company, Publishers, Philadelphia. (Cloth, \$1.00.)

Pulmonary Tuberculosis and Its Complications. By Sherman G. Bonney, M.D., Professor of Medicine, Denver and Gross College of Medicine, Denver. Octavo of 778 pages, with 189 original illustrations, including 20 in colors and 60 x-ray photographs. Philadelphia and London: W. B. Saunders Company, 1908. (Cloth, \$7.00; half morocco, \$8.50 net prices.)

Reference and Dose Book. By C. Henri Leonard, A.M., M.D., Emeritus Professor of Gynecology in the Detroit College of Medicine. New edition. 16mo, 145 pages. The Illustrated Medical Journal Company, Detroit. (Price. 75 cents.)

LITERARY NOTE

THE Philadelphia Academy of Surgery announces that for the Samuel D. Gross prize of \$1,500, essays will be received in competition until January 1, 1910. The conditions annexed by the testator are that the prize "Shall be awarded every five years to the writer of the best original essay, not exceeding one hundred and fifty pages, octavo, in length, illustrative of some subject in surgical pathology or surgical practice, founded upon original investigations, the candidates for the prize to be American citizens."

It is expressly stipulated that the competitor who receives the prize, shall publish his essay in book form, and that he shall deposit one copy of the work in the Samuel D. Gross Library of the Philadelphia Academy of Surgery, and that on the title page, it shall be stated that to the essay was awarded the Samuel D. Gross Prize of the Philadelphia Academy of Surgery.

The essays, which must be written by a single author in the English language, should be sent to the "Trustees of the Samuel D. Gross Prize of the Philadelphia Academy of Surgery, care of the College of Physicians, 219 S. 13th St., Philadelphia," on or before January 1, 1910.

ITEMS.

BATTLE & COMPANY, Saint Louis, have issued No. 6 of a series of eighteen illustrations in colors, showing as many dislocations of important joints. The present number graphically portrays a subglenoid dislocation of the humerus. It will be sent to physicians on application to the publishers.

THE Antikamnia Chemical Company, now located at 1624 Pine street, St. Louis, will begin September 1, 1908, the construction at the northeast corner of Pine and Fourteenth streets of a five-story and basement building which will be used for manufacturing and commercial purposes. It will have a ground area of 81x109 feet, the latter frontage being on Fourteenth street, and will be constructed of brick and concrete. It will be modern in every detail, being provided with sprinkler system, fast elevators, etc., and will cost in the neighborhood of \$75,000. The site has been owned by Mr. Frank A. Ruf, president of the company and a director in the Mercantile Trust Company for the past seven years.

The Antikamnia Company will occupy all of the new structure, the upper floors being used for a can and box factory. Its present quarters at 1624 Pine street are inadequate and the property on either side of it is so tied up that it can not be secured to extend the building. On this account the company expects to give up the building at the expiration of its present lease, which has a year or more to run, and to make the structure at Fourteenth and Pine its headquarters.

MEDICAL SUPERINTENDENT, CRAIG COLONY FOR EPILEPTICS, SONYEA, N. Y.

A competitive civil service examination for this position, open to residents of New York State, will be held September 26, 1908. For full particulars and application forms, address **Chief Examiner**, State Civil Service Commission, Albany, N. Y.

FOR RENT—Partly furnished if desired, and with immediate possession: Suite of Offices at 217 Franklin Street for **Physician**, containing five large rooms, and bath with hot water; also having sky-lighted operating room, with separate rear entrance and every modern convenience.

This suite is on ground floor, the location unsurpassed, surroundings in every way unobjectionable, and the opportunity considered rare and desirable and one that is seldom offered.

Apply—F. W. HUMBLE,
409 Franklin Street.

BUFFALO MEDICAL JOURNAL.

VOL. LXIV.

OCTOBER, 1908.

No. 3

ORIGINAL COMMUNICATIONS.

Some Points Worth Considering in the Treatment of Acute Gonorrhea.

By B. F. SENFTENBERG, M.D.

Attending Surgeon Beth Israel Dispensary, New York,
and

J. S. KRESHOVER, M.D.

Assistant Attending Surgeon Beth Israel Dispensary and
Bellevue Out-Patient Department, New York.

GONORRHEA is one of the most virulent and persistent diseases with which mankind is afflicted. It attacks chiefly the mucous membrane of the urethra and is often very rebellious to all known treatment. A urethritis may be either simple or non-gonorrheal, but usually it is gonorrheal in character and is essentially of sexual origin. Although the gonococcus, which is a diplococcus, attacks chiefly the mucous membrane of the urinary tract, it may often be carried through the circulation and involve the various joints and may in some rare cases even attack the endocardium and result in death. The inflammatory process thus produced by the gonococcus, if unchecked by early and appropriate treatment, may ascend in the case of both male and female, and invade the parts that are in immediate or remote anatomical relation. That gonorrhea is one of the most widespread and serious of infectious diseases cannot be denied, and that in its far-reaching effects it does not fall very far short of syphilis in importance, must be admitted by all physicians who have intelligently grasped the situation. Surely not less than 90 per cent. of the male population in the larger cities of the world are said to have or have had gonorrhea, and at least 50 per cent. of the female, and much of the male sterility may be ascribed to the gonococcus.

Since we know that the diplococcus of Neisser is the sole cause of specific urethritis, and that it has a most marked tendency to insinuate itself and proliferate in the folds of the urethra and particularly in the prostatic portion of the urethra, it follows that the destruction of this germ should be the main object of our treatment, and this is to be accomplished with as little injury to the tissues as possible. No case of gonorrhea can be looked

upon as cured in which although the discharge has ceased, the gonococcus can be found in the secretion of the urethra after a thorough massage of the prostate. Such examinations should be carefully made even after all apparent discharge has ceased, a great many times over a period of weeks and even months, before a physician is justified in declaring a case cured. To undertake the treatment of a gonorrhea without the aid of a microscope is in the vast majority of cases to invite a failure in the start. The secretions and the urine in the acute stage should be examined from day to day and the progress of the case noted.

Realising the latent powers for evil of the gonococcus we should therefore strive the more by the most thorough, judicious and long continued treatment and observation of this disease, to eradicate it and prevent this germ from taking a firm foothold in any of the folds or crypts of the tissues, there to spring into a renewed virulence under favorable circumstances. Just so long as cases of gonorrhea are improperly and insufficiently treated, will the very common uncured gonorrhea prevail, and not only may the subject's well being and even life be endangered, but he or she may transmit the dreadful pestilence to others. This, then, and the fact that to stop a discharge is not to cure a gonorrhea should be strongly impressed upon the minds of our patients and of the laity in general.

So far as treatment is concerned, to repeat again, it is essential for us to bear in mind that in the great majority of acute cases, the disease is limited to the anterior portion of the urethra, and that if we can bring our patient at once under proper care we can generally hold the disease in check so that the immediate anatomical parts will not be infected. As to proper treatment of this affection there is no unanimity of opinion, each method of treatment has its advocate and likewise its strong opponents. Nearly all, however, are agreed that no active treatment should be undertaken during the acute inflammatory stage; here cleanliness, restricted diet and rest should be enforced. When the sharp inflammatory symptoms have subsided, local treatment is begun and the most favored remedy at our disposal is protargol. The discharge should be examined, two-glass test made, and the character and the nature of the infection thus determined. The bowels should be frequently opened with saline purgatives, and copious urination should be induced for the washing away of as many gonococci as possible by the partaking of large quantities of carborated or plain water. Sexual excitement and violent exercise it is needless to say should be absolutely avoided; alcoholic beverages and stimulating foods or spices interdicted.

Our attention should be directed toward the general as well as the local treatment. To obviate the possibility of complications,

thereby checking the spread of the microörganisms beyond the urethral area besides keeping the urine in a more aseptic condition, the patient should be at once given sandalwood oil internally. The therapeutic value of this drug is so well-known as to require no special comment beyond saying that our success with it depends altogether upon the variety and quality of the oil used. From our own clinical observation in a vast number of cases treated at the dispensary and in private practice, santyl, which is the neutral salicylic ester of santalol, deserves special mention. Here may be noted a few of the many cases:

Case 1.—E. R., age 30; tailor. Discharge three days' duration; extreme pain in micturition; profuse purulent discharge. After two days' administration of santyl m. xv. q. four hours, pain began to subside and disappeared entirely at the end of the week; the discharge also became much thinner and scantier; at the end of the second week experienced no abnormal sensation in the urethra and bore the injection of protargol perfectly well. At no time was there any gastric disturbances.

Case 2.—A. L., age 19; electrician; presented himself on the first day of the onset of disease; glans very much edematous marked ardor and chordee; santyl at once given in doses m. xxi. q. four hours; all acute symptoms began to subside on the second day—at the end of the week began local treatment. At this time patient felt very comfortable; the discharge diminished from day to day and in the beginning of the third week ceased entirely. There was total absence of gonococci in the secretion. Expressed by prostatic massage; internal medication and local treatment still continued, however, for three weeks longer. For two weeks more there was no return of any of the symptoms although the patient was kept for further observation.

Case 3.—J. C., age 29; tailor; discharge one week standing; complained of painful and frequent micturition and very frequent erections which annoyed him very much; also of pain in the pit of stomach saying that a friend had advised him to take the Lafayette mixture. There was no marked local inflammation, so he was given at once santyl in capsules aa m. vii., 3 q. four hours. Two days later when he returned all uncomfortable feeling about the penis disappeared entirely; he slept better, and altogether the drug was well borne by the stomach. He was given anterior irrigation with protargol 1½ per cent. every other day and at the end of a week his urine cleared, and at the end of two weeks more discharge entirely ceased. He thought himself entirely cured and we lost all trace of him for four months.

Case 4.—A. J., chauffeur, age 28; first attack two years ago; present trouble three days' standing; complained of intense burning, perineal pains and constant discharge; santyl given in m. xxx. q. four hours. Borne very well by the stomach; all pains

disappeared entirely at the end of three days. Local treatment with protargol begun; the urine gradually cleared; discharge ceased at the end of ten days. Treatment continued for four weeks more; then told to return in ten days; he indulged in beer quite freely; there was no return of the symptoms.

Case 5.—J. S., age 40; laborer; discharge five days' duration; marked ardor; profuse discharge, at times bloody. Santyl m. xxi. q. four hours in capsules, symptoms gradually began to subside on the second day and at the end of the fourth day discharge became mucoid and quite scanty; was able to commence local treatment. Had no gastric disturbance at any time and in four weeks made an uneventful recovery. Was not seen for two months when he returned with a chancroid on the penis. The urine seen at this time was perfectly clear; there was no discharge.

Case 6.—M. R., age 23; tailor; discharge two days' standing. Intense scalding; almost constant erections; santyl m xv. q. four hours given. In two days felt entirely relieved; no gastric disturbance, so dose was increased to m xxi. q. four hours; anterior irrigation with protargol $\frac{1}{2}$ per cent. every day begun; urine then began to clear from day to day. On the twelfth day of the disease there was no more discharge, the urine was clear. After six weeks' treatment there was no recurrence of symptoms although patient was kept under observation.

Case 7.—A. L., age 21; clerk; first attack; discharge four days' standing, marked ardor and profuse discharge; santyl in m xv. doses q. four hours. On the following day symptoms markedly relieved, on the third day entirely gone. Anterior irrigation with protargol $\frac{1}{2}$ per cent. b. i. d. In two weeks discharge entirely ceased and urine cleared up. He then left for the country and took along sufficient number of capsules to last for two weeks. During this time he received no local treatment. Two months later he returned with no indication of the disease.

Case 8.—B. B., plumber, age 28; single; first attack; marked swelling of glans and pain in the groins; profuse thick purulent discharge; all these symptoms quickly subsided, there being no gastric disturbance. On the seventh day after having received daily irrigation q. protargol $\frac{1}{2}$ per cent. and santyl in xxi, m. doses q. four hours, discharge almost entirely ceased, appearing only in the morning. On the tenth day had no discharge, although the urine persisted slightly cloudy for one week during which time I increased santyl to four capsules aa m vii., q. four hours. Urine then gradually cleared, and during the following three weeks the urine was absolutely clear.

Case 9.—J. C., age 18; student; first attack; purulent discharge; three days' standing; marked ardor and frequent micturition; santyl xiv. m. q. four hours. On the third morning

began to show marked improvement, in that burning entirely ceased; at the end of the second week after daily anterior irrigation of protargol $\frac{1}{2}$ per cent. discharge entirely disappeared and for over three weeks did not recur.

As will be noted from the foregoing cases there was a remarkable total absence of complications; other cases are too numerous to mention, and almost without exception we found santyl most valuable and efficacious in that it never produced any untoward effects upon the stomach, kidneys or other organs, and it is also worth mentioning that it imparted no odor to the breath or urine as is common with the sandalwood oil usually employed. That this neutral salicylic ester of santalol exerts a far better influence on the disease than copaiba or any oleoresinous balsam is beyond question. It may also be added that it is advantageous to continue the internal medicament for some weeks after the total disappearance of the discharge.

As for local treatment we must bear in mind the importance of destroying the gonococci, while inflicting as little injury to the tissues involved as possible, at the same time healing and assisting the structures in combating the further progress of the disease. To accomplish this requires more or less skilful technique and protargol is about the best therapeutic measure at our command. Although silver nitrate, the old and tried remedy, is quite efficacious and is perhaps preferred by a great many, still protargol stands first, in that it possesses far more powerful germicidal properties, its more profound penetration into the tortuous crypt and deep recesses of the tissues, and its freedom from irritating and injurious effects upon the mucous membrane.

Something must also be said regarding the frequent employment of astringents. To begin with an astringent is to invite the multiplication of the gonococci, and an invasion of the deep-seated tissues because of their protection in the folds and ducts of the mucous membrane, where astringents which are seldom germicides cannot reach them. Just as soon as the intensity of the acute inflammation has subsided, and this can only be accomplished by careful diet, rest and the judicious employment of the santyl, then should anterior irrigation of protargol in the strength of $\frac{1}{2}$ to 1 per cent. be begun twice a day, or where impracticable once a day. Hand injections by the patient may be good but often these prove injurious and should not be wherever possible. The patient should be instructed to urinate into two clean glasses prior to injection and the appearance of the specimens noted from day to day before each treatment is administered. Usually after a few days careful local and general treatment the ardor gradually diminishes and quickly disappears; the dis-

charge becomes mucoid in character and scanty, and microscopical examination often reveals a rapid diminution in the number of the gonococci until finally these cannot be revealed. Treatment should, however, be continued, patient kept for observation and repeated examination of the urine and prostatic secretion if any, be made long after apparent cure at intervals of weeks.

1184 MADISON AVENUE, NEW YORK CITY.

Diagnosis Under Artificial Light. Its Difficulties and a Solution of the Problem.

By A. CRESSY MORRISON, Chicago.
Member Illuminating Engineering Society.

MOST physicians recognise the difficulty of accurately judging the condition of tissues by means of artificial illuminants. The difficulty, has however, usually been accepted as inevitable. Until recently, no artificial illuminant has been known which has the balanced spectrum of sunlight, and so where diagnosis has been necessary by means of artificial illuminants, the physician has done the best he could, occasionally correcting his opinion after a verification of the examination by daylight.

The eye, through all ages, has adapted itself to see by daylight. Its evolution has been wrought in harmony with the solar spectrum. The seven colors of the solar spectrum have a given intensity; combined, they make white light. All artificial illuminants, save acetylene alone, have an excess of one color or another. City gas light has an excess of red, kerosene an excess of yellow and red, the Welsbach burner an excess of green, the arc light an excess of violet, the incandescent an excess of orange and red. Acetylene, on the other hand, has the seven colors in such intensity that, compared with sunlight, the difference is negligible. The excess of one color or another in artificial illuminants upsets the judgment of the physician, and is bound to have an effect upon the validity of a diagnosis. If the eye has adjusted itself to see best by daylight, then, under daylight, colors have their normal values, and the mind, trained and adjusted to base its conclusions upon what the eye reports, can only with the greatest difficulty make the proper additions and deductions that an accurate conclusion may be reached. How can the mind say to the eye, which reports accurately what it sees, "you are deceived. The light by which you see that tissue is a distorted light. Therefore the color you report is not the real color of the object as seen by daylight. It is not so red as you say it is. Therefore the inflammation is not so bad, hence the case is not so serious."

We seldom think of it, but there is literally no color. The sky is not blue, but the light makes it appear so. Light, falling upon particles of matter, is diffused, but space, where there is no matter which will hold light, is absolutely black. The silver moon is matter, and this matter reflects the light of the sun to us. Therefore the moon is visible. The green grass reflects to our eye the green rays which come to it from the sun. Speaking broadly, if it could not reflect the green rays and could not reflect any other, the grass would be black. Color, therefore, does not exist except as the waves of light are thrown back into the eye from the object upon which we look. Waves of a certain length have a certain color. The slowest rays are red, and the quickest visible rays are violet.

If an object absorbs and neutralises all the rays or waves except the very long ones, and these are thrown back to us, we say the object is red. All light and color and every wave has ceased but red. The application of this to diagnosis must be immediately apparent. If a tissue is examined under city gaslight, in which the spectrum shows that there is a large excess of red rays, then a tissue, which in daylight would be normal, would under gaslight, appear to be much redder than it really is. The eye accurately reports the excess of red color, and as inflammation increases the ability of a tissue to reflect red rays, the mind instantly says the tissue is inflamed, while as a matter of fact, it is not the tissue that is inflamed, but, to put it in a curious way, it is the light which is inflamed. It has an excess of red.

If a physician is examining tissues under a green light, the tissues have an abnormal and ghastly appearance. Green light, if thrown upon a red surface in sufficient purity, leaves the red without light; therefore, the red appears black. If green rays fall upon a surface which in daylight would be red, the surface cannot respond; therefore, it has no color, and, in the absence of color, it is black.

It is unnecessary to go further in this line of thought, as physicians are already fully aware of the difficulties of proper diagnosis with artificial light. There are, however, some phases of the subject which are not always given consideration. In the case of an examination of the blood to discover an anemic condition, it should be remembered that, if examination under artificial illuminants is made, with an illuminant giving an excess of red, the condition of the blood appears much better than it really is, and under an illuminant which is deficient in red, the apparent condition of the blood is much worse than it really is.

So important is accurate judgment to the physician and the surgeon that the adoption of acetylene, which is really daylight

at night, in the operating rooms of hospitals is almost a necessity. The spectral similarity between acetylene and sunlight has only been recently brought to the attention of physicians, and its advantages were immediately recognised.

The ordinary portable lights like a house lamp, with a suitable reflector, have been adopted and brought into use by physicians who have seen the necessity of acetylene. As a matter of fact, small acetylene lamps of a portable character are in use in fifty-four out of the sixty public hospitals in New York city. The most eminent physicians connected with these hospitals have spoken of the value of acetylene in the highest terms. The investigation of the matter went no further than New York city, but the large proportion of hospitals in which acetylene is appreciated and in constant use was a surprise to the writer. These minor units do not meet the full requirements of the case. They are convenient because they are movable, and as an accessory to the system of hospital lighting have been proved valuable. There should, however, be in every hospital operating-room a complete system of acetylene illumination, proper reflectors should be provided, and whether the source of acetylene should be the modern house generator or cylinders, which are now used so extensively in railroad illumination, is a question which should be decided by local conditions. A perfect light for emergency operations at night is a desideratum of primary importance, and there should be no hesitation in working out a plan by which the hospital operating room should be given this nearest approach to daylight at night.

Acetylene is within the reach of every physician, and especially those in the country, as an individual household generator is now made by manufacturers in almost every city, which will produce acetylene for lighting an entire house, at a cost, candle power for candle power, which compares favorably with city gas at a dollar per thousand cubic feet. The apparatus and piping are not expensive and can be put into any house by a good plumber in two or three days, without disturbing furniture or walls. Over 150,000 individual installations are now located in country homes throughout the United States, so that its safety and utility are completely demonstrated. Many physicians have adopted acetylene as the common illuminant for their homes, and find it of inestimable value in their practice, and of great benefit to their patients.

Acetylene illumination is already recognised of immense value by dye houses, lithographers, artists and others who require an illuminant which will give them the ability to discriminate closely

between different shades and colors, and men of the profession will not be slow to add to their equipment so simple an improvement.

157 MICHIGAN AVENUE.

Practical Hints on the Management of Normal and Complicated Breech Cases.

With a Few Notes on Their Diagnosis.

By NEILSON DAVIE, M. B. Ch. B. (Glasgow), L. M. (Dublin.)

Late Clinical Assistant, Coombe Hospital, Dublin; Assistant Medical Officer, Brecon and Radnor Asylum.

(*The Hospital*, Aug. 29, 1908.)

THE chief dangers in breech cases are the extension of the arms and head, interference with the circulation of the cord, and delay in extracting the after-coming head, with the consequent risk of asphyxia to the child. Hence it is essential that a breech case should be diagnosticated early and suitable treatment be thus adopted in the first and second stages so as to minimise the risk of complications arising. If complications do arise they must be rectified as soon as possible. This must be done coolly and methodically, for once the accoucheur becomes flurried and excited the chances are that he rather hinders than expedites the delivery, and loses the child when it might have been saved. The incidence of breech cases is a little over 2 per cent. in labors with normal pelvis, and according to Herman they are as common again in cases where the pelvis is contracted. In the latter class of cases prolapse of the cord is apt to arise as a complication.

DIAGNOSIS OF BREECH CASES.

In the diagnosis of breech cases the chief points to be noted are the following. On inspection the long axis of the uterus will be noticed to be in the long axis of the mother's abdomen. Palpation will reveal the presence of a hard, round, smooth, and solid tumor (the head) occupying the fundus. This tumor will be found to ballotte freely and to move independently of the body. In the pelvic grip the tumor is found to be well above the pelvic brim. It is larger, softer, and more irregular than the tumor in vertex presentation, and following it up by palpating along the dorsum of the child there is no interruption or depression to be discerned. The pelvic tumor does not ballotte freely, and moves with the body, thus contrasting with the fundal tumor. On auscultation the fetal heart is heard above the umbilicus to one or other side according to the position of the fetus.

The vaginal examination is most important in the diagnosis, and the following points can usually be made out in the early

stage before a caput forms. If the membranes are intact there will be an irregular protrusion of the bag of membranes through the os. The presenting part will be found to be high up and not fixed. The trochanter can usually be felt. Next, if one can make out the bony triangle formed by the two ischial tuberosities and the sacrum of the fetus, there will be no hesitancy in deciding that the case is a breech. Within this triangle the finger may enter the anus, which must be distinguished from the mouth by the absence of the alveolar ridges and the tongue and by the presence of a sphincter grip and of meconium staining the finger. If the child is of the male sex the scrotum can usually be felt. If the perineum is much swollen, so that the parts cannot be felt distinctly, feel for a foot. See that there is no prolapse of the cord. Extreme care must be exercised in the examination and everything made out as gently as possible so as to avoid rupturing the membranes.

TREATMENT.

In the first place the patient ought not to be allowed to walk about, but be kept in bed during the first stage. By keeping the patient in bed, straining and bearing down is reduced to a minimum, and hence the bag of membranes is better preserved. Remember that it is quite a calamity for the membranes to rupture early in the first stage. If they have burst, a powerful factor in the dilatation of the cervix is thereby lost. Avoid all unnecessary vaginal examinations, for the more made the greater the risk of sepsis supervening. Have the rectum well cleared out by a soap-and-water enema and also keep the bladder empty. Do not forget to keep up the patient's strength by giving her stimulating hot fluids—*e. g.*, beef tea, thin gruel, milk and tea, and the like. Have all preparations ready in case the child should be born in a state of asphyxia—*e. g.*, mucous extractor and two basins, one with hot water and the other with cold—also have a couple of towels soaking in a hot antiseptic solution.

When the cervix is fully dilated, if the membranes have not ruptured, rupture them. Then examine to see if the cord has prolapsed. Ensure that the bladder is empty. Next instruct your patient when and how to bear down, so that she may take as much advantage of her pains as possible. In an ordinary case allow the breech to remain intact, for if you bring a leg down the size of the advancing part is much reduced and it does not act so efficiently as a dilator of the soft parts. Avoid all traction on the legs or the breech, as this interferes with the natural flexion of the arms and head, and as a result they may

become extended. Once the breech appears at the vulva put the patient in the cross-bed position with the hips well over the edge of the bed. In this position the accoucheur gets more room to work, and the fetal parts are not so liable to contamination. After the birth of the legs do not allow them to hang down, but hold them up and support them, otherwise extension of the arms and head may occur. Cover the feet, legs, and buttocks of child in a warm antiseptic towel which is ready prepared. This prevents contamination with the air, maternal parts, and the like. It also prevents reflex action causing attempts at respiration, and gives one a better grip of the fetus.

As soon as the umbilicus appears at the vulva insert the finger and draw down a loop of the cord and note if the pulsations are normal. If it is pulsating normally, and the child is making no attempts at respiration, which is noted by absence of movement of its abdomen, wait quietly and patiently, keeping the fingers on the cord all the time until the next pain comes on. Tell the mother to bear down as best she can when it comes on, and also get someone to press on the fundus from above downward and backward toward the sacrum, following the head down into the pelvis as it is being expelled. Usually this is quite sufficient to expel the fetus, and then, of course, the labor is completed as in an ordinary case. But at times, in spite of the greatest care, extension of the arms and head may occur.

COMPLICATIONS AND THEIR TREATMENT.

The following are the chief complications which may arise in breech cases: (a). impacted breech; (b) interference with circulation of the cord; (c) extension of the arms and head; (d) prolapse of the cord; (e) separation of the placenta. I will make a few remarks on the first three only.

(a) In cases of impacted breech the first proceeding should be to pass the finger up into the child's groin. If at all possible insert both forefingers, one in each groin. Press them well against the abdomen, so as not to injure the femur, and pull downward and backward and then forward. If this method fails, bring down a foot. Failing this, pass a skein of wool as a fillet round the groin and pull. If this fails, forceps may be tried, but they are dangerous, as they are apt to slip and damage the maternal parts. If the child is alive and the breech cannot be got to move by any of the above methods, pubiotomy may be very successfully tried if the conjugate is above seven centimeters. If the child is dead, crush the breech.

(b) If the cord is pulsating feebly and intermittently this means that it is being pressed on, and artificial interference is

necessary to save the child. Watch the abdomen of the child and note if there are any attempts at respiration, which may occur after the birth of the shoulders. If so, the head must be delivered immediately after the birth of the shoulders either artificially or naturally.

(c) If after the legs are born the patient gets a pain and the shoulders are not delivered, this is in all probability due to the extension of one or both arms above the head. Always free the posterior arm first, as there is no more room in the hollow of the sacrum. Pass up the hand which corresponds to the child's abdomen and flex the child's forearm down over the face into the vagina. Next free the anterior arm; if much difficulty is experienced reverse the position of the child so that the anterior arm becomes the posterior and then free it in the same way as the other. If the head is extended one method that may be tried to flex it is the following: Catch the feet in the left hand and put some traction on them in the axis of the mother and then in an upward direction. Pass the right hand along the child's abdomen and pass the forefinger into the mouth as far back as possible. Then exert traction on the lower jaw by means of the forefinger in the mouth. The direction of the traction is in a downward and backward direction. By the combined action of the two hands the head may be flexed and then delivered. Considerable help may be got by an assistant exerting pressure on the head above the pubis in such a way that flexion is promoted, whilst the traction is being exerted by the right forefinger. There are several other methods of delivery of the after-coming head which are too well known for enumeration in this article. In conclusion one may at an odd time have difficulty in delivering an after-coming head with the chin anterior. If the head is reversed it can often be quite easily delivered by the above-described method.

Food and Drug Adulteration. Their Medical and Legal Significance.¹

By THOMAS DARLINGTON, M. D.

Commissioner of Health. New York.

(*Medical Review of Reviews*, August 1908.)

THE term "adulteration" when applied to food or drugs is broad in its scope, but has been given a well-defined legal meaning. In general it may be said that adulteration consists in subtracting from a substance any part of its natural or inherent qualities or adding to it any ingredient which would render

1. Read before the Society of Medical Jurisprudence, May 11, 1908.

the article of a different nature than that of its expressed and natural form. This may be intentional or accidental, and the latter term covers the large class of permissible adulterants, such as the addition to foodstuffs of substances having themselves a food value.

Salt, sugar, vinegar and spices come within this class. Smoke may be used as a preservative of meat, and starch is commonly added to the salts composing baking powder for the purpose of absorbing moisture. In other words, an attempt at deceit must be considered.

Almost coexistent with the growth of this wonderful country, and seemingly as a part of the fierce business competition which has insidiously developed, this evil of food and drug adulteration has arisen. Individual states have in the past made laws which dealt more or less vigorously with the conditions which come within their jurisdiction. These efforts at reform, however, have been spasmodic in character and widely differing in their nature. Commendable though they were, their reformatory effect has been necessarily local and their execution, in many instances, scarcely more than admonitory, not prohibitive.

The conditions of substitution and adulteration of foods and drugs were little short of deplorable less than a decade ago, and no half-hearted measures could be relied upon to deal with this blot on the face of our boasted civilisation and high standards of right living. Probably no other form of wrongdoing could so intimately touch each one of us as this tampering with our food and medicines, yet our sluggish national conscience seemed a long time in arousing itself to deal with this patent yet insidious evil. Notwithstanding the positive assertion from certain mercenary quarters that they, not we, were to be the best judges of what was good for us, our national lawmakers, backed by the aroused sense of wrong on the part of their constituents, and in response to an urgent public demand, formed and passed what may well be called one of the most far-reaching and radical laws of modern times, the so-called "Pure Food Law."

Possibly you are all more or less acquainted with the component parts of this piece of beneficent legislation, but it is so direct in its statements and so inclusive in its meaning that I wish to repeat its exact definitions of adulteration and that other description, "misbranding."

In Section 7 of this act, which in its entirety was approved on June 30, 1906, it is stated "that for the purpose of this act an article shall be deemed to be adulterated: In case of drugs:

"*First*—If when a drug is sold under or by a name recognised in the United States Pharmacopeia or National Formulary it dif-

fers from the standard of strength, quality or purity as determined by the test laid down in the United States Pharmacopeia or National Formulary official at the time of investigation. Provided that no drug defined in the United States Pharmacopeia or National Formulary shall be deemed to be adulterated under this provision if the standard of strength, quality or purity be plainly stated upon the bottle, box or other container thereof, although the standard may differ from that determined by the test laid down in the United States Pharmacopeia or National Formulary.

"Second—If its strength or purity fall below the professed standard or quality under which it is sold.

"In the case of food:

"First—If any substance has been mixed or packed with it so as to reduce or lower or injuriously affect its quality or strength.

"Second—If any substance has been substituted wholly or in part for the article.

"Third—If any valuable constituent of the article has been wholly or in part abstracted.

"Fourth—If it be mixed, colored, powdered, coated or stained in a manner whereby damage or inferiority is concealed.

"Fifth—If it contain any added poisonous or other added deleterious ingredient which may render such article injurious to health; provided that, when in the preparation of food products for shipment they are preserved by any external application applied in such manner that the preservation is necessarily removed mechanically, or by maceration, in water, or otherwise, and directions for the removal of said preservative shall be printed on the covering or the package, the provisions of this act shall be construed as applying only when said products are ready for consumption.

"Sixth—If it consists in whole or in part of a filthy, decomposed or putrid animal or vegetable substance, or any portion of an animal unfit for food, whether manufactured or not, or if it is the product of a diseased animal, or one that has died otherwise than by slaughter."

Section 8 of this act, which deals with the subject of misbranding, is necessarily somewhat long, and I will not read its full provisions. Its most important points are well covered in that part which states: "That the term 'misbranded' as used therein shall apply to all drugs or articles of food, or articles which enter into the composition of food, the package or label of which shall bear any statement, design or device regarding such article, or the ingredients or substances contained therein which shall be false or misleading in any particular, and to any food or drug product which is falsely branded as to the State, Territory or country in

which it is manufactured or produced." One other provision is of sufficient importance to be mentioned; that is, the section which states that "all packages containing food or drugs must have stated on the label the quantity or portion of alcohol, morphine, opium, cocaine, heroin, alpha or beta eucaine, chloroform, cannabis indica, chloral hydrate or acetanilid or any derivative or preparation of any such substances which may be contained therein."

This law in its entirety is epoch-marking. It covers all interstate traffic and transportation, and must well be effective in restraining cupidity when practised on any extensive scale.

In addition to its provisions, there are in every community and state certain local conditions of this nature which may be dealt with only by the local authorities, for the production and sale within its own borders of any articles of the above-mentioned classes can only be met by the action of the governing power of the locality affected. At the present time the pure-food laws of many states and cities are almost entirely similar to the national laws. So that, in addition to the Federal officials who are charged with the enforcement of the national laws, we have here in New York city the inspectors of the Department of Health, who are constantly on the alert to detect violations of those sections of the Sanitary Code which deal with conditions of a like nature. Sections 68 and 69 of the Code are very similar in their phraseology with the relative sections of the Federal laws, and in the Board of Health of this city is vested the authority to deal with the local production and sale of these products.

Two questions must be considered in dealing with this matter: first, the intent to deceive or the element of fraud, and, second, the influence of the adulteration upon our health.

All misbranding and all adulteration of food and drugs, unless the fact of the adulteration is stated, is deception. The adulterant may be harmless, but a person has the right to know what he is buying, and if there be any comparative values in right we must assume that it is of the highest type when the question of the food we eat is involved.

In the line of harmless adulteration may be mentioned the sale of skimmed milk. That such milk has a definite food value is undeniable. If its sale in its proper guise could be assured, it would fill a well-defined place in the list of food-stuffs. The real harm, however, comes in the fact that it would require almost superhuman effort to prevent its being sold as whole milk. Our sanitary code requires that milk shall contain 3 per cent. of butter fats. If this fat in the shape of cream has

been removed from the milk, the sale of the remainder is a fraud and an imposition upon the consumer. So the addition of water to milk, harmless though it may be, as far as deleterious effects are concerned, is a deception.

The addition of preservatives to milk is a different matter. Formaldehyde seems to be the favorite in this regard. Used in the usual quantity—one teaspoonful to a 40-quart can of milk—its actual harmful effect upon health may be debatable. The main harm arises because the preservative allows the dealer to sell milk a week old under the assumption that it is fresh. The taste or the odor of the formaldehyde in such proportions is not distinguishable; its presence can be detected only by means of chemical tests. If used in larger quantities, or if used in the smaller amount for long-continued periods of time, we may well question whether it will not produce gastrointestinal disturbances.

Somewhat the same conditions exist in regard to the preservatives used to keep meat fresh or to treat putrid meat so that it may appear attractive to the eye and pleasant to the palate. Here it is not a question of stating on a label attached to the meat the fact that a preservative has been used. The main ingredient in these meat preservatives is sodium sulphite, a salt which has its place as a medicinal agent, but which some investigations seem to show is harmful to health when used for any long period of time. Whether this be so or not, a large part of the usefulness of these meat preservatives has been in their use upon chopped meat, decomposed or putrid, thereby restoring it to a salable condition without restoring its wholesome qualities. Such deception is criminal.

Coloring or coating food products so that they may have an attractive appearance is a form of deception which has been largely practised. Preserved fruits or vegetables may have a good, bright color, but never have the brilliant reds and greens so often observed in the artificially-colored products. While analine dyes, which are used to produce the reds of the berries and fruits, and copper sulphate, which gives the intense greens sometimes found in canned peas and beans, may not be actively harmful to health, their use cannot be condoned unless the buyer prefers to satisfy his esthetic preferences at the expense of his inner man. Benzoic acid and the benzoates, salicylic acid and borax, are the preservatives most commonly used in canned foodstuffs. Elaborate, detailed and painstaking experiments as to the results upon the human body of long-continued use of these substances have been undertaken under the direction of Dr. H. W. Wiley, chief chemist of the United States Department

of Agriculture. In a paper on "The Influence of Preservatives and Coloring Matters and Their Relation to Nutrition" read before the New York Medical Association in October, 1905, Dr. Wiley has summed up his conclusions in regard to the matter in the following words: "The experiments which go to show that no hurt has come from the use of preservatives and coloring matters are in reality condemnatory. Their use must be justified by positively beneficial results. On the contrary, with the prejudicial results obtained, the use of preservatives and coloring matters in foods, even in the small percentage of cases in which they are used, is or should be condemned. My own experience leads me to believe that the use of even small quantities of ordinary preservatives for a long while or large quantities for a short while leads to unfavorable effects. There is a general loss of weight, a feeling of lassitude and malaise, and in some cases more pronounced symptoms of intestinal and metabolic disturbances. If it be assumed that with wholesome food the metabolic relations which are observed are normal, and these relations are changed on the addition of preservatives and coloring matters, then this change, no difference what it may be, must be regarded as prejudicial, because it is not normal."

Since the approval of the national food law and the enactment of the similar provisions in the sanitary code of the Board of Health, which were approved on September 10, 1906, there has been a widespread and radical reform in regard to these matters within New York city. The Board of Health is working in harmony with the Federal authorities, and our experience coincides with that of the Secretary of Agriculture, which he expressed on December 1, 1906, in the following words:

"From the tenor of the correspondence received at this department, and from the oral hearings which have been held, it is evident that an overwhelming majority of the manufacturers, jobbers and dealers of the country are determined to do their utmost to conform to the provisions of this act, to support it in every particular and to accede to the opinions of this department respecting its construction."

Personally, I have had many conferences with the manufacturers and dealers of this city, and the same spirit of willingness to conform with the laws has been manifested on their part.

Our inspectors are constantly on the alert to detect infringement of the laws. Samples of food which may be suspected of adulteration or misbranding are sent to the chemical laboratory of the department and there subjected to analysis. Mis-

branding may often be detected by mere inspection and investigation. Small fish caught off our coast, packed in oil and labeled "Imported Sardines" may be pure, attractive and satisfying to our sense of taste, but the practice cannot be defended on moral grounds, and a large variety of our supposedly foreign delicacies have been unable to withstand a critical investigation of their origin.

A subject which has merited considerable attention on our part has been the large traffic which is carried on in so-called "spot" and "canned" eggs. This practice, which is thoroughly reprehensible, consists of setting aside those eggs which show a spot when held to a light. They are not fit for the fresh-egg trade, so are broken, the contents emptied into cans, a proportion of some preservative, usually formaldehyde, is added and the cans sealed. Packed in this manner the eggs are preserved for a long period of time. Their sale is mainly to manufacturers of pies, cakes and biscuits. The fact that the eggs are themselves in a condition unfit for human consumption, added to the fraud involved in covering up their deficiencies with a preservative which hides their true state, reveals a double iniquity. Large consignments of these eggs have been seized and destroyed, and the department is at the present time confronted with a suit for damages involving some \$2,000, the amount claimed as representing the assumed value of one seizure of these eggs.

It is my desire to proceed along the lines of the enforcement of this law in complete harmony and unity with the interests involved, and unwarranted interference with the rights of property or business holds no place in our plans, but evasion or studied non-compliance with the law merits and will receive stringent and forcible attention.

From a legal point of view, canned goods present a rather intricate question. It is manifestly impossible for an inspector or chemist to swear that because one can of a certain brand has been found to contain a preservative not noted on the label all other cans of the same brand likewise contain the same preservative. Condemnation and seizure of the entire stock of a dealer on such grounds would not stand the test of law, but the remedy consists in bringing suit on the basis of the one can whose contents were proved to be adulterated. This procedure is usually effective in forcing the retirement of the whole consignment.

It is not my purpose to take up in detail the specific action on health of each form of preservative. To do so would be simply a reiteration of established facts and a repetition of certain primary dictums of therapeutics; nor, at the risk of a tire-

some and too lengthy discourse, may I discuss the full procedure used by the Department of Health in dealing with this class of cases. I would, however, mention briefly our system of meat inspection which follows up the animals intended for slaughter and food consumption from the time of their arrival within the city limits through the process of slaughtering the animal, dressing the meat and its transportation through the streets, until it passes through the retailer's hands and is sold to the consumer. During the last six months of 1907, as a part of this work, 41,824 inspections were made of slaughter houses, stockyards, butcher shops, packing-houses and other places connected with the meat industry; during the year 2,974,948 pounds of meat were condemned and destroyed.

The city markets, retail stores, bakeries and other places where food is prepared and sold, and even the pushcarts, are constantly under our supervision. During the past year 3,533,858 pounds of such foodstuffs, including fish, were seized and destroyed, while 7,540,516 pounds of fruits met the same fate. This immense quantity of edibles was unfit for food, some part of it by reason of the addition of foreign substances and some because of its natural decay. In a number of specimens of food analyzed to determine the presence and character of suspected preservatives 16 instances were found in which chopped meat, or so-called Hamburger steak, contained sulphurous acid. Smoked liverwurst was preserved with both sulphurous and boric acids; frankfurters found both artificially colored and containing boric acid; vinegar doctored with sulphuric acid, and "olive oil" made up largely of cottonseed oil; gelatine containing sulphites; "lemon extract" with no lemon in it, and "pure honey" found to be glucose with a small quantity of sugar.

On the whole the analyzed products have conformed with the letter of the law, and I have simply cited the above examples to show that there is still need of vigilance. I believe that the quality of the food now sold in this city maintains a high average, and I do not wish to be understood as sounding any note of alarm regarding its purity nor the honesty of our merchants.

Although these violations of the law have been brought to the attention of the Corporation Counsel, and actions have been brought by him against the offending parties, as yet no cases have been taken upon appeal, and consequently there are no written opinions so far as the Department of Health is concerned in cases handled by it. A case under the state law, which is somewhat similar to our sanitary code, has just been decided in regard to a brand of tomato catsup which was

labeled as follows: "Prepared from whole ripe tomatoes; no artificial color, and contains one-tenth of 1 per cent. of soda benzoate." This catsup was found to contain double the stated quantity of soda benzoate, a clear case of misbranding, and held to be a violation of the law.

Before the insertion in the sanitary code of those sections which have to do with the adulteration and misbranding of food and drugs the Department of Health had proceeded against the evil of drug substitution and deceptive branding of medicines. Section 65 of the code gave ample authority for this work, and numerous instances were discovered of direct substitution of drugs in physicians' prescriptions, as well as that other fraud, the careless or intentional difference in the quantity of the drug dispensed from the quantity of drug ordered. In the former class the commonest forms of substitution were the use of acetanilid in place of the then more expensive phenacetine, and the use of wood alcohol where grain alcohol was indicated. In the second class the evil was even more widespread. Instances were not uncommon where a prescription called for a number of capsules or powders, each containing a definite amount of a drug or a mixture of drugs, the dispensed packages were each found to contain from one-half to three-quarters of the quantity called for. Crude drugs, extracts and tinctures which were stated as of a definite pharmaceutical strength in the United States Pharmacopeia were ordered, and the dispensed article found to be made up of drugs assaying only a fraction of the standard of total alkaloids.

If substitution in the case of food may be regarded as an evil, substitution in the case of drugs reveals such a greater degree of iniquity that it can only be regarded as a crime. Persons in health and the full degree of an alert mentality may to a great degree protect themselves against fraud and deception, but the helpless invalid should receive tender consideration and undeviating honesty from those persons in whom he has placed faith to the extent of trusting his regained health, or even his life itself. Many a conscientious physician, trusting in the known efficacy of a drug of known potency and power, has been puzzled and disheartened when following its administration the expected result has not ensued. Here it is not a question of a slight deviation in the standard of normal health. Prolonged illness or even death may be the outcome of this reprehensible fraud on occasions. The retail druggist may be entirely guiltless and the fault may be traced to the manufacturer.

In analysis of 29 samples of crude drugs for their alkaloidal strength made by the Department of Health not one was found to conform to the standard. Samples of powdered belladonna leaves with a standard of .35 per cent. of total alkaloids were found to contain amounts varying from .06 to .21 per cent. Powdered opium varied in its percentage of morphine from 11 to 14 per cent., while a sample of saffron examined showed 28 per cent. fine saffron petals and 72 per cent. aniline-dyed petals, probably magnolia or daisy. That crude drugs may naturally vary in these degrees is well known. The fraud lies in the concealment of the true state of affairs, and the remedy in their assaying and the plain labeling of their alkaloidal strength.

In the endeavor to correct these conditions we have had the earnest co-operation of nearly all the large firms of druggists, and such a state of affairs no longer exists.

Misbranding of drugs and medicinal mixtures covers a multitude of sins. The opium, cocaine and whisky habits often date their onset from the use of patent medicines containing them. The moral and mental degradation of the victims and the resultant and widespread suffering entailed as a result of this vicious taste is too well known to need more than a passing mention. The cocaine habit alone has grown to alarming proportions. Its sale, other than on the prescription of a physician, is now prohibited, and I am glad to record that one of the most notorious offenders in this respect has had the opportunity of repenting of his misdeeds afforded by an enforced six months' imprisonment.

Catarrh powders, under many designations, have been found to owe their soothing effects and long-continued use to the presence of this drug, while mixtures for internal use and variously labeled as "tonics" and "pain killers" have long owed their popularity to the soothing effect of the opium or the exhilaration of the whiskey they contained.

Substitution, adulteration and misbranding are potent frauds, but the American people may always be trusted to restore the balance of right. The great moral awakening which has made possible the passage and enforcement of "the pure food and drug law" has also shown itself in the general co-operation on the part of the producer and dealer. The millennium may not yet be in sight, but conditions are rapidly improving, and the future is bright with promise. Constant vigilance may still be necessary, but the law is becoming less and less difficult of enforcement, and the final recognition of its just and beneficent purpose is well within the realm of possible attainment.

Some Commonly Overlooked Causes for Stomach and Bowel Disturbances.¹

By ROBERT T. MORRIS, M. D.

Professor of Surgery in the New York Post-Graduate Medical School and Hospital, etc.

(*Monthly Cyclopaedia*, August, 1908.)

IF I were to give two points in advice to a class of medical students just about to begin lifework, I would say: first, keep out of debt; next, remember that cases of stomach and bowel trouble are not cases of stomach trouble. Most of the dyspepsias are nothing more than symptoms, like a cough or a sneeze. Why do the bowels cough and sneeze? Often because there is a little bit of pepper at the end of the cecum, known as the "appendix vermiformis," which happens to be undergoing infective or degenerative changes. This is one of the most commonly overlooked causes for stomach and bowel disturbance. Not at the time of an acute infective invasion with explosive features, when we have to dodge to get out of the way when the patient vomits, for we all recognise the character of the stomach and bowel disturbance right then; but if instead of an appendix undergoing infective invasion we have an appendix undergoing fibroid degeneration, we are apt to be looking the other way while the bowel coughs and sneezes mildly and chronically in what is known as intestinal dyspepsia. Instead of speaking of the appendix as a bit of pepper let us elaborate a little more and have two kinds of bowel excitors at this point: the appendix which is the seat of acute infective invasion is a sparker and keeps things going at a lively clip; the appendix undergoing fibroid degeneration, on the other hand, is a G. D. cap of the sort that we used to put on the old musket in the days when we loaded it up with slugs and watched behind the stone wall for a woodchuck. Sometimes the cap went, and sometimes it didn't; sometimes it just sizzled and fizzed. If we liken the appendix undergoing fibroid degeneration to a G. D. cap, we shall find that patients often refer to it the same way. We have, in this type of appendix, an irritative lesion rather than an infective lesion. It takes more patients to the doctors' office than any other kind of appendix trouble, but the doctors, in general, do not know it—this year. One doctor tells the patient that he has intestinal indigestion, and when the patient tires of this doctor he goes to another one who tells him the same thing, and that is about all the benefit the patient gets out of it. Why does the appendix undergoing fibroid degeneration cause so much disturbance and such persistent disturbance? It is because the coats of the appendix replaced by

1. Read before the American Therapeutic Society, May 8, 1908, Philadelphia

connective tissue, retain their nerve filaments, and these nerve filaments are irritated by contracting connective tissue in the appendix, just as they are in the scar of an amputated leg. The irritated nerve filaments excite the intimate ganglia of the bowel wall (Auerbach's plexus and Meissner's plexus), and the function of the bowel is deranged. Sensory nerves as well as sympathetic nerves are excited, and these patients have a feeling of discomfort in the appendix region, which now and then amounts to actual pain, but it does not send the patient to bed. The patient is inclined to press over the appendix region with his hand; he suffers from chronic indigestion, and is in a state of more or less general unrest. It is my belief that this type of appendix, so common in middle life period, is a safeguard against real appendicitis, as we understand the term, and for two reasons: first, because the structures which are engaged in infective processes—mucosa, submucosa, and lymphoid—are being removed by connective tissue replacement; and, in the second place, because the irritation of entrapped nerve filament calls out a constant local hyperleucocytosis which is protective. This type of appendix is very different from the scarred appendix resulting from an acute infective invasion, because in the latter type nerves are destroyed along with other tissues, and we seldom have persistent stomach and bowel disturbance caused by the scarred appendices, unless peritoneal adhesions in the vicinity cause annoyance. So little is fibroid degeneration of the appendix known this spring, that many of these appendices have been operated upon by surgeons on the supposition that they were dealing with a chronic infection of the appendix, and surgeons operating in such cases have sometimes been so disappointed at finding nothing but a little degenerate appendix left, that they have closed the abdomen without removing it, and the patient has continued to suffer; whereas, if the surgeon had removed the little G. D. cap, his patient would have gained forty pounds in weight and would have had a feeling of deep gratitude for our whole profession.

These specimens which I pass about represent various stages of fibroid degeneration of the appendix, from specimens still retaining many of the normal structures, to specimens consisting of little more than fibrous strings, and yet each one of these specimens is the *memorable* of a cured patient. On account of my interest in the subject some of my assistants and friends got to calling this type of appendix by my name, but I object to this nomenclature for two reasons: first, because Senn and Ribbert both described the condition before I took up the study. Senn called the condition "appendicitis obliterans," and Rib-

bert referred to it as a "a normal involution process." Senn's an "itis" that causes "obliterans," but an "obliterans" that causes the "itis." Ribbert's description is not comprehensive, because we do not associate involution with an inflammatory condition. Another reason why I do not wish to have these called Morris appendices, is because the nomenclature went wrong and got to stand for the normal appendix among many who quoted the name in a spirit of fun, and by *reductio ad absurdum* the logical deduction was that I believed in removing normal appendices. I have never at any time, in speaking or in writing, advocated the removal of normal appendices, and my reason is a very definite one. My reason is that in removing a normal appendix we open a tiny spigot of infection in a field that is not guarded by protective leucocytosis at the moment. If we remove an appendix which has been the seat of an infective process for a few hours, it makes little difference whether we wash our hands before or after operation, for the patient is protected; but when we remove a normal appendix in an unprotected field, look out for the little spigot!

Another commonly overlooked cause for stomach and bowel disturbance is eyestrain. Many ophthalmologists are familiar with the fact, but few are willing to give their time to a painstaking study of this particular part of their subject. They are too anxious to get to the next patient. San Jose scale is the worst pest in the apple orchard, and the "next patient" is the worst pest in the office of the ophthalmologist. It requires a great deal of special study on the part of the physician and surgeon to know which eye men should see into in their dyspepsia cases. Some ophthalmologists, without a proper sense of proportion, have made so much of the subject that their views are held to be fanciful and others have given so little attention to the subject that they are not qualified to express an opinion. Almost anyone of us can get from the patient a history of headaches or of frowns which will lead him to send his patient to the ophthalmologist with the request for either negative or positive testimony bearing upon the matter of dyspepsia.

Bile-tract adhesions cause an immense amount of stomach and bowel disturbance, and yet this cause is commonly overlooked. Most of us have adhesions in the region of the gallbladder and bile-ducts. These adhesions are commonly of no importance, and in other cases they are of dominating importance. Bacteria and their toxins taken from the bowel to the liver by the afferent vessels of the portal system, are in part excreted by the liver, and on the way out they set up inflammatory processes in the mucosa of the gallbladder and bile-ducts which

lead to desquamation of endothelium on the peritoneal side, with exudation of plastic lymph. This lymph later forms adhesions which frequently engage the pylorus, the hepatic flexure in the colon, and other structures in the vicinity. This inflammation of the bile-tract region is often subacute, and passes by as many names as we formerly gave to appendicitis before we understood that condition.

Loose kidney is another commonly overlooked cause for stomach and bowel disturbance, and as with bile-tract adhesions there are loose kidneys which cause little or no disturbance, and there are other loose kidneys which act as a loose bolt in the patient's works. The discriminating diagnostician takes pains to classify the different kinds of loose kidney, and to apply tests which show the rôle played by loose kidney in any given case.

Ulcer of the stomach, obstruction of the circulation by nephritis, improper use of alcohol, ice water, and tea, are not included in my subject, because these causes for dyspepsia are not commonly overlooked. Diagnosticians are keen enough in making the diagnosis in this old field of observation, but according to my experience the recognised causes for dyspepsia are distinctly less in number than the overlooked causes. How are we to make a differential diagnosis between the different overlooked causes that I have brought forward today? In the first place, we will call up a central telephone station consisting of a pair of points situated approximately an inch and a half from the navel on either side of the navel. Many young business men complain that it is difficult to find a profitable occupation, and yet they are unwilling even to take the pains to select at the outset the kinds of occupation in which it is possible for them to become millionaires, but almost anyone can become a millionaire if he cares to take the trouble. In the same way almost anyone can make a diagnosis of the cause for almost any dyspepsia if he cares to take the trouble. Now, for a starting point, let us go to our pair of points which represent the lumbar ganglia, and which give testimony as soon as we ask for it, by making deep pressure with the fingers, to determine whether the right group or the left group is hyperesthetic, singly or together, or not at all. If we start out with examination of the pair of points, we shall find that this examination of the P. P. is of equal importance with urinary examination in older fields of work. Remember, that examination of the P. P. is of equal importance with examination of the urine. If the dyspepsia is caused by fibroid degeneration of the appendix, we shall find hyperesthesia at the point on the right side of the navel, singly and alone. If it is caused by sigmoiditis, we

shall find the left group of ganglia hyperesthetic singly and alone. If it is caused by some pelvic condition, we shall find hyperesthesia at both right and left points; for instance, if an appendix and an oviduct happen to lie side by side in the pelvis, and we cannot determine by ordinary means which one is the source of irritation, call up the telephone station at the pair of points and find out. If it is the appendix, there will be hyperesthesia at the right point alone; if it is the oviduct, there will be hyperesthesia at both points. By making use of this telephone station we can often trace the cause for a dyspepsia to a hernia or to hemorrhoids, and I recently traced it in an obscure case to a distended left seminal vesicle that turned out to be a primary focus for tuberculosis, which is rare. If there is hyperesthesia at neither one of the pair of points, look for something above the level of the navel for the cause of the dyspepsia. Take up the question of eyestrain or of bile tract adhesions, or some of the commonly recognised causes for dyspepsia.

It is difficult for some of us, who are half a hundred years old, to take up a new line of observation in this way, and many men are so trained to the habit of resisting external impressions that they become convinced very slowly. I belong to this class myself, but I am very grateful to men with whom I disagree, and who oblige me finally to come to their points of view. The neurologists, as a class, are the hardest men to shift from their positions, because their knowledge is so weighty that it has ponderous momentum and velocity along established lines. Did you ever see a stag come to the spring at evening to drink? He steps out gracefully but boldly, elevates his beautiful head, shakes his magnificent antlers, and surveys the forest and glade and looks as though he owned it all. That is the neurologist. Do you know what a little 30.30 bullet behind his right shoulder blade will do? This is the patient with nervous dyspepsia.

Rest as an Important Factor in the Nonoperative Treatment of Gynecological Disorders.¹

By EDWARD A. WEISS, M. D., Pittsburg, Pa.
(*Pennsylvania Medical Journal*, September, 1908.)

THE advances made in modern gynecology have been so distinctly surgical that many nonoperative procedures have been neglected. This is clearly exemplified in many of the recent textbooks which devote little or no space to the palliative treatment of pelvic disorders. The surgical treatment alone is taught so that many valuable therapeutic means have undeservedly fallen

1. Read before the Allegheny County Medical Society, October 15, 1907.

into disuse. The result is that too often needless and sometimes harmful operations are performed on the female pelvic organs. By such unnecessary operations not only are the patients not relieved but the profession is criticised, and often justly so.

There are many pelvic conditions which yield only to surgical treatment, and in which therapeutic and other palliative measures would be useless and sometimes harmful; as, for instance, in growing neoplasms, pus accumulations or complicated displacements. In other cases the patient may choose between a long continued nonoperative or an operative plan of treatment. A third class of cases embraces medical as well as operative treatment in order to secure the best results. In still other cases non-operative measures only are necessary.

Before deciding on any line of treatment for the correction of pelvic disorders, a most careful and painstaking examination must be made. The best results are to be had not always by the one who operates most, but by the one who knows when not to operate. Certain operations easy of execution are often employed as a routine measure when nonoperative means would be productive of more good. Possibly of all operations none is more frequently abused than the operation of curetment. Not infrequently a simple functional derangement is converted into a real pathological condition by the indiscriminate use of the curet.

The uselessness of drugs in many pelvic disturbances is well known. That no drug can have an elective action on the tubes, ovaries or uterine mucosa is well known. Yet in spite of this knowledge many standard as well as proprietary drugs are prescribed for endometritis, salpingitis or inflammatory conditions of the pelvis. But the fact must always be borne in mind that certain remedies by their general systemic action influence certain local pelvic conditions; as, for example, a brisk purge may by its depleting action often relieve pelvic congestion and painful menstruation, or the proper employment of iron and arsenic may be the very best remedy for the correction of certain functional menstrual disorders.

Some of the more generally adopted measures in the palliative treatment of gynecological disorders in addition to medication are elimination, douches, local applications, tampons, massage and electricity. But the most important general agent in the treatment of female disorders is rest. This is a factor which has not been given the attention it deserves.

In this connection rest not only implies cessation from work but also from functional activity. When we tell the average patient that she should rest it is interpreted to mean lounging about the house with no definite routine of living. When we prescribe

rest we should explain minutely what the patient should do, just as we describe minutely the diet of a dyspeptic.

Rest is required in a number of conditions in gynecology but the more common instances are (1) in acute inflammatory conditions; (2) in congestive pelvic disorders; (3) in certain displacements complicated by splanchnoptosis; (4) in nervous disorders referable to the pelvis, especially neurasthenia.

According to the indications rest may be (1) absolute, continuous rest in bed, (2) partial rest in bed, (3) rest at stated intervals, (4) rest with exercise, or (5) isolation.

The principles of rest were first pointed out by Hilton in his lectures on Rest and Pain in 1860. He stated that "it is an admitted physiological axiom that each structure or organ, whilst actually employed, is in a state of vascular excitement or turbulence and, therefore, enlarged during that time. So it is noticeable that each organ of the body which is liable to the rapid supervention of activity in its proper function is so placed in its relation to surrounding structures as to permit of temporary enlargement during the persistence of that activity. When it returns to its state of rest or period of self-reparation, it may be said to have returned to its normal or standard dimensions."

We know from clinical experience that rest in bed decreases the amount of blood sent to the part, and also lessens the force of circulation. It has been demonstrated that the heart beats about fifteen times a minute less when the patient is recumbent than when he is erect. The benefit to the local condition and the consequent relief from congestion is, therefore, great.

Rest in connection with acute pelvic infection should be absolute. The patient should not be allowed to leave her bed under any circumstances; neither should she be allowed to sit up in bed. The necessity of such absolute rest has been proved repeatedly in cases of acute pelvic peritonitis which were treated at the patients' homes, for three or four weeks without the temperature remaining normal longer than a few days at a time. The sending of the patient to the hospital or the placing of a competent nurse in charge of the patient would repeatedly result in the temperature remaining normal, with a continued improvement in the inflammatory condition. The improvement in every case could be traced to the fact that the patient was kept at absolute rest under direct supervision. The patient, unless instructed to the contrary, does not consider sitting up in bed or getting up to empty the bladder or bowels detrimental to speedy recovery. In treating pelvic inflammatory conditions, other measures should of course be employed, such as elimination, ice to the abdomen, diet, etc., but rest is of imperative value.

Our present knowledge of the acute pelvic infections is such that much local treatment, particularly by operative interference, should be employed only in a small percentage of cases during the acute stage of the affection. Formerly we were taught that the presence of pus was an indication for immediate operation. We now know from clinical experience that in such cases, when treated by absolute rest, the infection becomes less virulent and that the bacteria and toxins disappear. Unless secondary infection occurs, sepsis usually disappears in from two to three weeks.

Until about four years ago it was the rule to operate at almost any stage of pelvic infection. A comparison of our postoperative mortality as well as morbidity with the present method of waiting two or three weeks after all evidence of sepsis has disappeared, shows a marked improvement in favor of the later method of treatment.

The necessity of rest in cases of bleeding is well known, nevertheless it is a therapeutic measure which is too often neglected in the treatment of menorrhagia, subinvolution or other uterine bleedings. Ergot, hydrastis and other similar drugs are notoriously inefficient when not supplemented by rest. In like manner, pelvic engorgement with its accompanying pelvic pain is best relieved by absolute rest. If such a plan of treatment were instituted in selected cases of so-called congestive endometritis, many needless curetments would be avoided.

Posterior displacements and partial or aggravated prolapsus of the uterus, especially when associated with ptosis of the abdominal viscera, are undoubtedly relieved, but of course not cured, by the recumbent position. While more of such cases should be treated by surgical measures only, there are conditions such as age, constitutional disease or even family considerations which do not allow of operative treatment. In such patients it would be an injustice to disregard the case by denying that there is any other relief than by the knife. If the case is one of retroposition of the uterus without any complication, the treatment should be reposition of the uterus together with a properly fitting pessary. To prevent undue pressure and at the same time to avoid the pelvic venous stasis, which attends such conditions, rest in the recumbent position for at least one hour every afternoon should be insisted upon as a most important adjunct to the treatment. This form of treatment is particularly applicable to the all too numerous class of patients who for social and financial reasons must work without sufficient relaxation. Such patients feel relieved when lying down and for a few hours afterward, but standing constantly for six or eight hours causes

a return of the symptoms and if the standing position is maintained for ten or twelve hours the condition is more aggravated and the distress is consequently greater.

Pelvic disorders and neurasthenia are so often closely associated that frequently it is almost impossible to determine which is cause and which is effect. Any diseased condition should of course be given the proper surgical and medical attention before pronouncing it neurasthenia. It is in this class of patients particularly that the note of warning should be sounded against operating for pelvic disorders with the expectation of relieving the patient of her neurasthenic symptoms. The treatment of pelvic neurasthenia presents a varied problem to the attending physician. It would be advisable in many cases to treat the patient for several days before operating, if such a procedure is indicated. In this way the symptoms can be studied closely and the rest would be of decided benefit in many ways. This treatment could best be conducted with the patient in bed, and better in a hospital where she will be away from home influence. In a few cases, a systematic Weir Mitchell rest treatment should be tried. If the patient responds to treatment there should be an increase of from two to four pounds a week. The benefit is often extraordinary not only as to the neurasthenia but also as to the pelvic condition.

The advantage of the rest treatment can best be demonstrated by the improvement shown by some patients during the three or four weeks in bed after operation. The rapid improvement is due not so much to the operation as to the enforced rest, for example, cases of extreme prolapsus uteri with its long train of symptoms, such as emaciation, gastric and intestinal distress, nervous derangement, and the like; and it would be no exaggeration to say that such a patient derives as much good from the prolonged rest in bed as from the operation itself.

The only objection to this long continued inaction is that certain objectionable effects would manifest themselves, such as poor elimination, inactivity of muscles, accumulation of fat, etc. The most important measure to overcome these defects is the employment while in bed of regular systematic massage or manipulation of the muscles, by which means a healthy condition can be maintained until such time when regular muscular exercise can be resumed.

In regard to bodily exercise the index should be the strength and general condition of the patient. A mistake too often made is to make weak and debilitated patients take long walks. For such a patient rest is more desirable and fresh air may be had at the same time.

It may seem from the foregoing that I am opposed to operative treatment in gynecological conditions, but such is not the case. Let us operate for true surgical conditions when a real indication exists.

The suggestions offered are not new, but the principle of rest is too often neglected or is relegated to a minor place in our treatment of gynecological patients, and the object of this paper is to emphasize a simple but most important adjunct to our non-operative treatment of pelvic disorders.

DISCUSSION.

Dr. L. Litchfield, Pittsburg: It is very refreshing to hear the nonsurgical treatment of gynecological cases so exhaustively and suggestively discussed by a gynecologist. Dr. Weiss's most interesting paper shows us that at least one gynecologist appreciates fully the great value and importance of nonsurgical treatment in many of these cases. I am neither a gynecologist nor obstetrician, but I wish to bear witness to what Dr. Weiss has said regarding rest in these cases, and I wish particularly to call attention to the value of the knee-chest position combined with rest in many cases of chronic displacement, and, particularly, a postpartum case which showed a tendency to prolapse and retro-displacements; also, as to the value of the pessary worn for a few months in some of these post-partum cases.

Dr. K. I. Sanes, Pittsburg: The importance of rest in acute pelvic inflammatory diseases has lately been recognised by the gynecological profession. Rest improves the general health of the patient and puts her in better condition for the operation. Having allayed the acute inflammation, it enables us during the operation to distinguish the diseased from the healthy tissues. It also enables us to study better our patient and her disease, and thus to correct our incomplete or faulty diagnosis. Even complete cure can at times be attributed to rest. But to get the benefit of the preliminary rest treatment and at the same time not to run any unnecessary risk of complications and accidents, it should be undertaken at the hospital under supervision of the surgeon and under care of a nurse so that sudden changes demanding immediate intervention may not be overlooked.

In this connection it is interesting to note the change that has been taking place lately in the postoperative treatment so far as rest is concerned. Instead of keeping our patients in bed three weeks after serious operations, we let them sit up on second or third day, let them walk on the fifth or sixth day and send them home at the end of the second week. Of course, we must use our judgment in this matter. Patients of low vitality, neurasthenics, hernias, and the like, must have their usual postoperative rest, but the severity of the operation itself bears hardly any relation to the length of time necessary for postoperative rest.

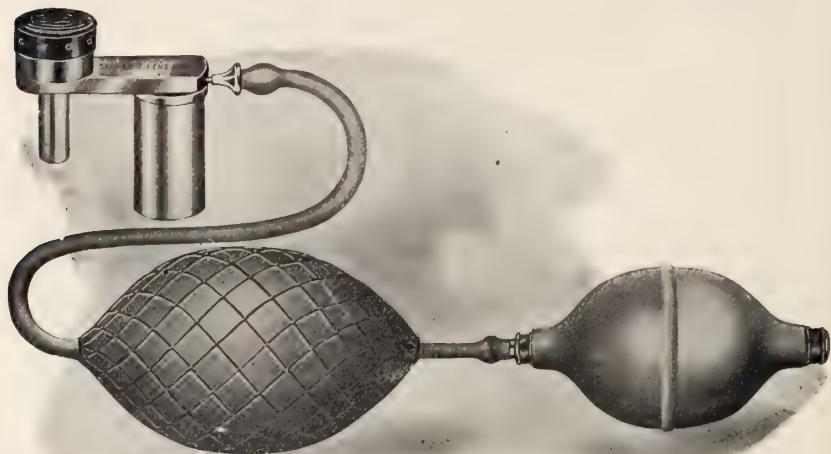
A Compact Ether-Freezing Microtome.

By EDWARD C. MANN., M. D.

Medical Department, University of Buffalo.

THE accompanying cut shows an ether-freezing apparatus which can be used with any microtome and by which the general practitioner is enabled to make a quick diagnosis.

Numerous methods of freezing material for microscopical sectioning have been used, chief among which are the carbon dioxid method, salt and ice, and ether freezing by means of a spray. The carbon dioxid, although perhaps the best method for a large laboratory, freezing larger pieces of material, is impractic-



MANN: ETHER-FREEZING MICROTOME.

cable for small laboratories and the general practitioner. The tanks of carbon dioxid are expensive and apt to leak. The apparatus is quite expensive and cannot be obtained easily in all places. The tanks of gas are often found empty just when one wants to use them, and not rarely they contain a good deal of water and iron rust.

The salt and ice method gives much more trouble, is slower and not so cleanly as the method here shown. A physician always has ether in his office. Ether freezing is then the ideal method if an apparatus which is not cumbersome, will not wear, and which will freeze the material can be had. In particular most ether freezing atomisers require rubber tubing for the connections. The rubber dissolves and soon plugs the fine tubes. The cut shows a convenient and compact ether atomiser con-

structed entirely of metal, devised by the writer. The ether is sprayed in finely divided globules by means of an ordinary atomiser nozzle. That which does not evaporate is run off from the spraying part into the cup which holds about 10 cc. of ether, enough to freeze a piece of material 1 m. m. thick and 1 cm. square, thus allowing sufficient number of sections to be cut with a minimum of ether and time. The material should be fixed in a 10 per cent. formalin solution, that is, (10 per cent. of the 40 per cent. solution of formaldehyde) as is usual in all methods. Certain forms of tissue, as fat, are very hard to freeze, but for general work and quick diagnosis, the apparatus here shown, made by the Spencer Lens Company, will be found very satisfactory. Only the best quality of ether should be used.

37 ALLEN STREET.

ABSTRACTS.

The Influence of Urotropin on the Urine.

INTERESTING findings are reported by Richard Stern (*Zeitschrift f. Hygiene u. Infektionskrankh.*, Vol. 39, 1908), in which he says: with urotropin a liberation of formaldehyde or antiseptically-acting formaldehyde compounds best takes place in acid urine. A urotropin urine with alkaline reaction is less antiseptic. By alkaline urines Stern means urines to which sodium bicarbonate has been added. There is therefore no contradiction between his experimental results and the clinical observation that urotropin acts well when the urinary reaction is alkaline. For a clinically alkaline urine means one which has undergone ammoniacal decomposition—one which is acid in the kidneys and is only in the bladder infected with uric acid-decomposing bacteria. For the practical employment of urotropin it is important not to weaken its action by simultaneous free administration of alkalies.

Though free flushing of the urinary organs is rightly regarded as an important therapeutic measure, it involves diluting the antiseptic in the urine. Therefore, when the dose of urotropin can not be proportionately increased, the patient should be ordered to drink large amounts of liquids throughout the day, while larger doses of urotropin are given morning and evening.

Deep seated inflammatory processes of the bladder, renal pelvis, and the like, are less amenable to urinary antiseptics. In tuberculosis and other deeply penetrating infectious processes, a cure can not be attained with urotropin. The remedy is, however, of service by restraining bacterial development in the urine

and alleviating the irritating action of the urine on the diseased mucosæ.

Stern thinks urotropin is by no means used enough before and after instrumental procedures on the urinary organs. Urotropin in large doses uniformly distributed (60 grains a day in 3 to 6 doses) should be given in all cases in which obstructed urination favors infection, before and after the introduction of instruments (catheters, cystoscopes), and before and after gynecological or surgical procedures in which injury or contusion of the bladder may occur. Stern recommends a large dose late at night, to render the nocturnal urine antiseptic. Otherwise much of the success attained during the day is negated during the night.

In phosphaturia, says Stern, urotropin acts when the excretion of urine turbid with earthy phosphates is due to ammoniacal fermentation. His cases of this class were mostly of preceding gonorrhea in which secondary staphylococcus infection occurred. In neurasthenics, who often suffer from hyperacidity and constipation and therefore freely take alkaline waters and vegetable acid salts, the food alone may suffice to produce an alimentary phosphaturia. Here urotropin is unavailing. But when the urine of such patients is weakly acid or neutral, a moderate formation of ammonia or uric acid-decomposing organisms suffices to induce precipitation of earthy phosphates. A stronger urinary infection can, of course, also lead to phosphaturia, even if the food is not responsible. In such cases the phosphaturia is rapidly obviated by urotropin in medium-sized doses. Usually the urotropin must be given continuously because generally only an inhibition of uric acid-decomposing organisms is effected.

Stern considers it erroneous to speak of the dose. It varies in accordance with the resistance of the disease producers and other factors in each individual case. Often when $7\frac{1}{2}$ grains urotropin thrice daily proved unavailing, the number of bacteria rapidly decreased when the dose was doubled or trebled.

Urotropin in the Lumbago of Febrile Affections.

FRANZ WEITLANER (*Weiner klin.-Therap. Wochenschr.*, No. 25, 1908,) adverts to the fact that some of the commercial hexamethylentetramins develop upon standing—especially when the air is moist—an odor of ammonia or formaldehyde which is offensive to the patients. This, however, he never saw with Schering's urotropin.

In 1904 (*Monatsh. f. prakt. Dermat.*, Vol. 39), he recommended urotropin in spinal neurasthenia with phosphaturia and lumbar fatigue and in all forms of lumbago. He now lauds it

especially in influenzal lumbago and the lumbago which closely resembles it, *i. e.*, that occurring at the beginning of acute inflammations of the respiratory tract and angina. Here one or two urotropin tablets coup the affection or at least afford striking relief. Patients with lumbago that prevents their arising in the morning, whose every movement is painful, are able to go about in the room a few hours after taking urotropin.

Almost all febrile processes commence with stiffness of the extremities and lumbar pain. Here, too, urotropin acts beneficially. We must deposit the origin of lumbago in the kidneys or consider it a neuromyopathy of the dorsal lumbar region. In the first case, urotropin must act by its uric-acid-solvent and disinfectant properties; in the second case, we must assume either a direct action of the urotropin circulating in the blood upon the lumbar region or else an effect from the formaldehyde reabsorbed through the urinary mucosæ.

Weitlaner now makes it a routine practice to treat ordinary influenzas with a combination of urotropin (6-grain doses) with opium-ipecacuanha-sodium-salicylate in coffee, and considers this the best antiinfluenza treatment. He believes that urotropin is not without influence on the grippe itself.

Collargol Enemata in Septic Affections.

CURT SEIDEL (*Deutsche med. Wochenschrift*, July 30, 1908,) says: the introduction of collargol into the system by the inunction of unguentum Credé develops a gradual effect and its employment is limited in cases of emaciation and in painful affections. Hence this method is indicated in mild to medium severe or localised and in chronic or subchronic infections. The intravenous injection of collargol, though the sovereign method in grave cases where a rapid and intensive effect is necessary, is often technically difficult. In such cases collargol is often advantageously administered per rectum as originally proposed by Loeb (Schlesinger's division of the Vienna Franz-Joseph Spital) in puerperal sepsis and endorsed by Witthauer in joint rheumatism.

Given by enema, collargol is, of course, less rapidly absorbed into the blood and tissue fluids than when injected intravenously; moreover, the entire quantity is rarely absorbed. Hence a correspondingly larger dose must be used per rectum.

Collargolum enemata have been given by Seidel in over 100 extremely severe cases, such as were formerly treated with collargol intravenously. He gives the case histories of eight typical ones. The treatment almost never fails, not even in very grave

cases, if it is only pushed with the necessary vigor and persistence—a fact which Seidel desires to impress on those physicians who have spoken disparagingly of collargol after they saw no result from their timid and small doses. Collargol is, of course, no panacea; just as a rheumatism or a malaria can not be cured with a single dose of a salicylate or quinine, just so is it irrational to expect a sudden recovery from a sepsis or pyemia after one insufficient or delayed administration of collargol.

Seidel's cases showed that collargol enemata have a material, if not a decisive, influence on the favorable course of severe affections. They produced a rapid improvement in the general condition, return of sleep and appetite, and remission of fever, more or less quickly in accordance with the severity of the case. Self-deceptions are wholly excluded with one who has thoroughly studied collargol therapy.

Seidel gives the following directions for collargol enemata: (1) A cleansing clyster with warm soap suds. (2) Fifteen minutes after the rejection of the clyster and passage of the fecal residue, a careful irrigation with sodium chloride solution is made, to remove intestinal mucus. (3) Fifteen minutes thereafter an enema of 30 to 75 grains of collargol in two to four ounces of warm boiled water, once or twice daily. This is for severe cases; the dose in milder or chronic ones is 15 to 30 grains. (4) Upon the appearance of the effect, the dose is diminished, but the enemas should be continued for at least two weeks. In case of recrudescence, immediate resumption of the treatment, if the relapse is not due to abscess formation or other local process.

Rectal application of collargol, which leaves nothing to be desired in simplicity and convenience, is indicated not only in septic processes, but also in infectious diseases and mixed infections. He enumerates rheumatism, pneumonia, typhoid fever, septic scarlatina, septic diphtheria, anthrax, leprosy, cerebrospinal meningitis, dysentery, infectious gastrointestinal catarrh (particularly in children), and other general and local bacterial invasions such as angina, phlegmon, erythema nodosum, erysipelas and septic nephritis.

Cuguillere's Serum in the Treatment of Tuberculosis.

EUGENE CARAVIA, New York, describes Cuguillere's serum as a vegetable serum which carries colloidal metals already assimilated, that have become organic, living, and possessed of their maximum activity. It is a yellow liquid with an odor of garlic, and is made from organic sulphur taken from the juices of *brassica*, *allium*, watercress, horse-radish and other herbs, which are

antiscorbutic and antirachitic. Its formula is: allylum sulphide 1.0; tincture of myrrh 1.1; Hayem's glycerinated serum 100. The author gives descriptions of experiments on animals and man by the use of this serum as a curative treatment in various forms of tuberculosis, undertaken by various authors in different countries. Examinations were made of the internal organs of cattle cured by this method with the result of finding no tubercle bacilli, and cure by cicatrisation and phagocytosis. The serum acts in advanced cases where tuberculin is powerless on account of the too great reaction produced. It increases appetite, facilitates digestion and increases weight. Treatment is easier than with tuberculin. The minimum dose is one to two cubic centimeters and the maximum five to fifteen. The writer reports four cases treated by himself and cured. This serum attacks the cause of the disease, the bacilli themselves. It promotes fibrosis, it stops hemorrhage, lessens fever, stops diarrhea and night sweats, helps appetite, strengthens the heart, and lessens cough and expectoration.—*Medical Record*, September 26, 1908.

A Readily Soluble Hypnotic of the Veronal Group.

ERNST STEINITZ (*Therapie der Gegenwart*, July, 1908,) says: the ideal hypnotic must be readily soluble and, therefore, rapidly absorbed, so that the soporific effect may be prompt and certain and that there may be no undesired prolongation of it. Diethyl-barbituric acid, one of the best hypnotics known, has the disadvantage of very slight solubility (1:145).

Steinitz experimented clinically with the monosodium salt of diethyl-barbituric acid, placed at his disposal by Schering. It is a crystalline powder 20 per cent. soluble in water; by heating a 30 per cent. solution, permanent in the cold, can be prepared. He used it by mouth, per rectum and subcutaneously.

By mouth the salt is always given dissolved in water, when it has no unpleasant taste. Its action was quicker and more certain than that of diethyl-barbituric acid; occasionally the salt had good effect where the base had been ineffective. A cumulative toxic action was absent, though in some cases $7\frac{1}{2}$ grains were given daily for considerable periods.

In most cases the superiority of the new salt is doubtless due to its being administered thoroughly dissolved. It is best taken on an empty and consequently acid-free stomach—on retiring—when it passes unchanged into the intestines and is there quickly absorbed. In the ratio in which absorption and therefore excretion are hastened, the salt naturally diminishes the danger of cumulative toxic actions.

Per rectum the action of the drug was quicker and almost always more intensive. In some cases the effect was excellent when the same dose by mouth had no effect at all. Anesthetic properties were also observed at times. In several cases of cardiac and bronchial asthma, with night attacks, the greatest possible relief was effected by the rectal injections. Seven and one-half grains were dissolved in about a dram of water and injected with a small rectal syringe.

Subcutaneous injections are intensive rather than rapid in effect. Seventy-five minims of a 10 per cent. solution are used; this hardly irritates and is apparently more quickly absorbed than more concentrated solutions. Abscesses never occurred, though some patients were morphinists who in other places were sown with injection abscesses. In threatened delirium tremens the salt has about replaced chloral by subcutaneous injection. The injection of the salt seemed especially suitable, too, for patients under antimorphine treatment: here its quietening effects were marked.

Steinitz concludes: "On account of its extreme water solubility, the salt can be conveniently administered in a well dissolved and most finely subdivided state. The absorption proceeds more quickly when it is administered on an acid-free stomach and when given per rectum, because the drug remains in its readily soluble form.

Rectal administration can be recommended when the stomach is to be spared and especially for obstinate insomnias.

Subcutaneous injection we recommend at present only in special cases, where the patients refuse oral medication, for morphine habit, and as a last resort in severest insomnia."

SAMUEL WYLLIS BANDLER, New York, in his *Medical Gynecology* (W. B. Saunders Co., 1908,) has the following passage: Acute female gonorrheal urethritis: Of the internal antigonorrheic remedies, arhovin is said to be free from the untoward effects of the balsams. Arhovin internally is indicated in inflammation of the urethra associated with pain on urination and cystitis. In the chronic form it sometimes gives great relief. Arhovin causes acidity in alkaline urine, even in one undergoing ammoniacal fermentation. It is sedative and anesthetic to mucosæ and does not annoy the stomach. Six to twelve capsules, each containing 4 grains, are to be taken daily.

ONE of the most important criteria of a well-fitting pessary is that the finger can pass fairly easily between its sides and the vaginal wall.—*International Journal Surgery*.

TOPICS OF PUBLIC INTEREST.

At Last, The Oxygen Bracer.

Rejuvenator for Work or Play—Successful Experiments on Athletes—Physicians and Surgeons Have Already Proved Its Value.

[*New York Tribune*, September 13, 1908.]

OXYGEN for jags, for athletics and for new surgical purposes is coming to the front in a remarkable way. This gaseous element of the air, which the common people have been inhaling right along without knowing it, as M. Jourdain unconsciously talked prose, seems destined to revolutionise modern life in many directions. Uses profound and trivial are within realisation. Scientists are engaged in experiments on the effects of the gas on animals and men. Athletes are clamoring for a stimulant which has no evil after-effects and which will enable them to clip several seconds from the records. It is suggested that campaign orators who tank up on oxygen may yet be able to save the country. The fountain of youth and the elixir of life are nothing compared to the aerial element, according to some enthusiasts.

It may cause chagrin in the bosom of the average person to learn that, while he has been breathing the New York mixture that passes for air, the virtues and delights of oxygen have been monopolised by a select circle of financiers, actors, opera singers and fashionable folk. The epicure takes his oxygen highball before and after dinner. John D. Rockefeller is said to indulge moderately in this "gas of the gods," having assured himself that it is not a bad habit, like the use of drugs. The recent cavortings in the Stock Exchange might be attributed to too many oxygen cocktails consumed by brokers. Mme. Nordica warbles more divinely, it is said, when her lung cells are saturated with the Olympian element. Bernhardt would have disappointed more than one American audience if her fragile breathing apparatus had not been reinforced by the contents of several steel tanks. Sir Henry Irving was wont to tour the country in a stateroom filled with a few hundred dollars worth of the gas. The wonderful endurance of fashionable women through a winter's siege of dinners and balls is ascribed to a more or less secret indulgence in the gas that cheers but does not inebriate.

There are a myriad thrilling speculations as to the future. How soon will the subway be oxygenised? When will business men be able to carry flasks of gas in their back pockets and frequently take an enlivening draft for that tired feeling? The cost is not important, for you can get a good drink—that is, a good number of inhalations—at an oxygen parlor for \$1.50, but

obstacles of a mechanical nature remain. To be portable the gas must be highly compressed. A pocket flask might be as dangerous as a bomb. John G. Clifford, the president of an oxygen manufacturing company, was killed at Niagara Falls last week by the explosion of a cylinder charged with the gas to a pressure of 2,200 pounds to the square inch. His legs were torn off and hurled fifty feet away. He had been warned by conservative oxygen makers in this city that his experiments with high pressures were dangerous. The ordinary pressure used is 225 pounds to the square inch.

GIVES ATHLETES NEW VIGOR.

Other problems must be solved and questionable points settled before oxygen becomes a popular beverage, so to speak. Shall the government define a standard gas as it has defined a standard whiskey, guarantee purity and collect a revenue tax? Will the oxygen saloon be licensed and will the moralists of the latter twentieth century deplore violations of the Sunday gas law?

The first application of oxygen to athletics in this country took place at the aquatic carnival of the Chateau des Beaux-Arts, Huntington, Long Island, on August 29. The success of the application has caused many athletes to write to oxygen manufacturers asking how much gas it takes to beat the record. Chicago has enthusiastically embraced the innovation and promises oxygenated football at Marshall Field under the direction of Coach Stagg. The frightful possibilities of a flying wedge inspired with the superhuman energies of the gas do not seem to trouble the Windy City sportsmen. Perhaps they rely on the fact that oxygen medicinally applied may cure the hurts that oxygen as a stimulant has caused.

Professor Leonard Hill, of the Royal Society of London, made some athletic experiments a few weeks ago which led to the recent tests at Huntington. Dr. E. E. Smith, of No. 26 East 29th street, an exponent of experimental medicine and professor of physiology in Fordham University, after witnessing the oxygen races, made a statement to *The Tribune* representative.

"The men to whom oxygen was administered were the winners," he said. "It seems clear that its administration increases the capacity in a short struggle. It would not be scientific for me to draw indefinite conclusions from one experiment. Oxygen is not a stimulant. It merely saves the heart and lungs work by supplying to the blood the necessary oxygen which has been stored up in all the tissues, and particularly the muscle tissues of the body, by previous inhalation. The stored up supply becomes available for some time after administration. A frog muscle kept in salt solution for twenty-four hours retains its power to con-

tract, showing that it has stored a quantity of oxygen, without which muscular action would be impossible. The indiscriminate use of the gas is not to be recommended. There are impure mixtures which are dangerous."

Dr. W. J. Geis, professor of biological chemistry in Columbia University Medical School, said:

"The experiments seem to bear out Professor Hill's work in England. Theoretically, a man's energy ought to be increased five times by breathing oxygen, since air is only one-fifth part oxygen, and that is the element which produces energy through combustion. Of course practically there cannot be so much gain. Its use calls forth reserve power and potential strength. There is not much fear of its causing overexertion. A man may walk twenty miles and lose several pounds of flesh, or row in a boat race and lose four or five pounds without injury. The danger of an oxygen habit is at present slight, if only for the reason that the gas is not obtainable in 'vest pocket' form. It is not a stimulant like morphine, nor does its effects last the whole day. It releases energy, imparts a wholesome exhilaration, makes a man feel strong and vigorous. I have no doubt its uses could be extended in these days of stress and strain. It might be useful in tiding over temporary states of weakness. Victims of gas poisoning may be resuscitated. Mining and other industries offer a field for extensive application. Our houses could be ventilated by oxygen, although at greater cost than by a regular ventilating system. The excessive use of oxygen might cause digestive trouble, because a man would have to eat unduly to make up for extra energy spent."

Edwin Fairfax Naulty, a scientific and athletic amateur who suggested and administered oxygen at the Beaux Arts races, said:

"Ray Mulvey, the swimmer, raced twice over an identical course of 100 yards. His time without oxygen was 1 minute 6 seconds; with oxygen, 58 2-5 seconds. He was not distressed at the end of his dash, while a companion showed usual fatigue. No doubt there was a psychological factor that helped Mulvey. J. Ferber, another oxygenated swimmer, made his hundred yards in 1:04 2-5, and his best previous record was 1:12. Miss Elaine Golding took oxygen before her quarter-mile race and made the distance in 8:04 2-5, swimming without distressing effort. Being unimaginative and somewhat skeptical, Miss Golding was probably not affected by suggestion. Ferber was a good subject. He said he had never swam before with such ease, and his breathing and heart action were much relieved. George Lewers took the gas and broke his under-water record, swimming about sixty yards under water in one

minute 36 seconds. Mulvey took oxygen for three minutes in inhalations of forty and twenty seconds; he then rested two minutes and began his swim. Lewers had three deep inhalations and rested five minutes before his underwater swim. Ferber had about the same quantity. Miss Golding had one inhalation about an hour and a half before her swim and three inhalations immediately before it. The total results were faster time, more effective muscular effort, less distress in breathing, greater confidence, less heart action. The inhalation of oxygen before a race gives the athlete a reserve in his blood and tissues. From experiments made on myself I am certain that physical efficiency is increased. I doubt that oxygen can increase mental efficiency. I would not advise the use of it except under medical direction. The commercial product is likely to contain nitrous dioxid, which is 'laughing gas,' or chlorin. That which we used was analyzed for purity before administration. I have administered the gas to eleven athletes, with beneficial results in all cases."

USED BY WELL KNOWN PEOPLE.

Dr. Frank Northrop, of No. 6 East 45th street, informed the writer that he was the pioneer oxygen therapist in this country, and had administered the gas to such well known persons as John D. Rockefeller, Sir Henry Irving, Sarah Bernhardt, John Hare, Mme. Nordica, Edmond Kelley, Charles Edward Russell, Charlotte Teller and E. H. Sothern. The oil man takes a treatment whenever he has a cold or is falling down in his golf average. His friends have suggested to him that he ought to endow an oxygen dispensary, where the poor could get inhalations at a nominal charge. Sir Henry Irving spent \$1,500 for gas and treatment on one tour of this country, and declared that the stuffiest dressing room and the smokiest stage hell had no terrors for him when his lungs were stored with the vitalising element. As Mephistopheles and Dante Sir Henry was pretty constantly in the infernal regions, and had especial need of oxygen. However, he was inclined to be reckless in its use, as when he flooded his stateroom with hundreds of gallons of gas while traveling. Mme. Bernhardt arrived in this country with a hemorrhage of the lungs, which was promptly stopped by the astringent effect of the gas, and she was enabled to fulfil her engagements. John Hare, suffering from heart weakness at noon before a first performance, astounded his American manager by a triumphant playing of his part at night. The physician had a tank of gas at the theatre, and kept the actor keyed up to the proper pitch, while avoiding an overdose. There was a German tenor who was to make his debut at Carnegie Hall, singing against sixteen harps.

and his voice was in such a condition that he feared a signal failure. The tenor's lungs were scientifically irrigated. "I made so much noise," he reported afterward, "that they couldn't hear the sixteen harps." Singers and actors are warned, in fact, that they are in danger of shouting if they use ordinary effort after taking the gas.

Epicures who have tarried long at Sherry's or Delmonico's find it convenient to step into the oxygen parlor and get the indigestible surplus of food and drink burned out of their systems more speedily than by physical exercise and in a more refined manner than the gourmands of ancient Rome rid themselves of banquet gorges. Theoretically it would seem that these fast livers only accelerate their pace by the use of oxygen, and that they would finish their careers in about half the time required by ordinary sybarites. Fagged out business men and neurasthenic women call at the office or send for a few tanks of gas to be consumed at home. Actors, lecturers and singers are usually treated the day before a performance and are advised to eat and sleep after treatment. A natural drowsiness often follows the administration in nervous cases. Locomotor ataxia, paralysis and other diseases are said to have been cured by the treatment. Dr. Northrop does not believe in administering pure oxygen, but uses a compound of 60 per cent. oxygen to 40 per cent. nitrogen, "which is a stable and unvarying chemical combination, as fixed in composition as water itself."

According to Dr. William Seaman Bainbridge, a New York surgeon, oxygen has never had its proper place in medicine and surgery. The present revival of popular interest in the gas coincides with a revival of interest among physicians. About five years ago Dr. Bainbridge had the idea of employing oxygen in certain forms of tuberculous peritonitis. Other surgeons had used the gas to "flush out" the abdominal cavity after operations, but in Dr. Bainbridge's method the oxygen is infused into the cavity and left to be absorbed. This method had a remarkable success at the Beth Israel Hospital last July, when it was tried by Drs. Silver and Phillips. A sterile tube was inserted in an incision in the abdomen and one thousand cubic centimeters of oxygen were infused into the cavity. Then the wound was sewed up in four layers, making it airtight. Out of three cases of tuberculous peritonitis and several cases of germ peritonitis, which are usually fatal, there was only one death. The rest were cured. Presumably the gas destroyed the disease germs and stimulated the tissues toward recovery. The antiseptic power of oxygen is well known in the form of peroxide of hydrogen.

ITS USE IN MEDICINE.

The operation of "artificial pneumo-thorax" has also been tried with oxygen at Beth Israel Hospital recently. It is applied in cases of single lung tuberculosis, an incision being made in the patient's back through which oxygen is admitted, forcing the diseased lung away from the wall and giving it a rest while the healthy lung works for two. The direct benefit of the gas in tuberculosis is now being investigated. It is feared that the bacilli thrive on the oxygen almost as much as the patient.

Dr. Bainbridge conducted a series of experiments with cats last winter to determine the effects of oxygen under various conditions. He reported that it was wonderful how quickly cats and human beings responded to the gas during operations. Pulse, color and respiration were improved when oxygen was introduced in the abdominal cavity. In severe operations where the shock was very great the patient rallied almost instantly. When the lungs were washed out with oxygen after anesthesia, the patient quickly regained consciousness, felt no unusual nausea and often was able to walk from operating room to ward. Stillborn infants have been revived by the gas. It has been used subcutaneously for such diseases as carbuncle, erysipelas, sciatica and hydrocele with successful results. Asphyxiation and drug poisoning yield to the treatment. Epileptic fits have been favorably treated. Excellent results are reported from the introduction of oxygen into the intestines. Pneumonia cases have long been treated with the gas. It was administered to New York tunnel workers suffering with "the bends." Among the uses suggested by Dr. Bainbridge are inhalations before and after anesthesia, inhalations for colds and respiratory disorders, injections into joints and abscesses, and infusion into the abdominal cavity in a variety of operations. It is said the Zulus recognise the therapeutic power of oxygen by carrying their men wounded in battle to mountain tops and exposing their wounds to the air. Japanese surgeons open the abdomen in cases of tuberculous peritonitis and expose the cavity to air and sunlight for fifteen or twenty minutes at a time.

Oxygen was discovered by Scheele in Sweden in 1773, and one year later by Priestley in England. Air is a mechanical mixture of four-fifths nitrogen and one-fifth oxygen. It has not been found practicable to obtain oxygen directly from the air. The commercial method is to heat a mixture of chlorate of potash and black oxide of manganese in a retort to a temperature of 292 degrees, allowing the resultant gas to be purified by passing through a solution of caustic soda, then compressing it in steel cylinders by means of a force pump. The manganese does not

yield oxygen, but merely permits decomposition of the chlorate of potash at a low temperature. One pound of chlorate will produce four and one-half cubic feet of oxygen, weighing about five and three-fifths ounces. The usual pressure of cylinders is 225 pounds to the square inch. So-called pure oxygen is about 89 per cent. with 9 per cent. of nitrogen, no chlorin and a trace of carbon dioxid. Cylinders of different sizes contain from 75 to 150 gallons of gas, retailing at \$5.00 to \$10.00. The Board of Health forbids the use of the inhaling apparatus, which consists of a rubber tube and a glass water bottle, through which the gas passes, by more than one person. The annual production of oxygen in this country, mostly confined to New York, is said to be worth \$1,000,000.

Pasteurisation of Milk.

Interview with Nathan Straus.

NEITHER war, nor pestilence, nor famine claim as many victims as impure milk. It is the most terrible foe of humanity, all the more because it gives no outward sign of the danger.

After an absence of fourteen months, which I have devoted to the pure milk propaganda in Europe, I am pleased to learn on my return that my efforts in the United States have borne good fruit. I refer to an ordinance of the Chicago City government requiring the pasteurisation of all milk from cattle not proven free from tuberculosis. For the adoption of this measure Health Commissioner Evans deserves great credit.

I have also learned of the work of the New York Milk Committee, which has taken up the question in an experimental way for scientific purposes. While the amount they are distributing—a thousand bottles a day—cannot make an appreciable reduction in the death rate in a child population like that of New York city, still it proves that this serious question of the milk supply is receiving the earnest consideration which it demands.

The Tuberculosis Congress in Washington, being held this month, is another step forward in the fight for pure milk. For the white plague is nowadays agreed by scientists to be caused mainly by transmission of the tubercular germs from cow to man. I have prepared a model plant which I will exhibit at this Congress to demonstrate my method of pasteurisation.

I consider pasteurisation of the milk supply—and the great majority of the scientific world agrees with me—one of the most important weapons in fighting the white plague.

If farmers, dairymen and the public at large were all acquainted with the facts in regard to the relation of the milk supply to the public health, there would be little need for private, institutional or legislative measures of relief.

But unfortunately there still exists great ignorance of the danger that lurks in milk, although infected milk has become one of the most fruitful sources of disease.

When I began my work sixteen years ago, little or nothing was known of this danger. But hand in hand with my educational measures of erecting pasteurisation plants and of distributing pasteurised milk, scientists have been asking whether it was not high time to protect the public from these death-dealing germs. I had the satisfaction of seeing the death rate in New York city more than a third reduced between the year 1893, when I began my work, and 1907, when I left for Europe.

I went directly to Brussels to attend the Second International Congress des Gouttes de Lait, where physicians and scientists from the entire civilised world assembled.

I found then that in Europe even less was known of the danger of infected milk, and less attention had been paid to measures of relief, than in America. At this congress I began my European crusade by moving a resolution advising against the use of raw milk for infant feeding. This resolution was unanimously carried.

Since the adjournment of the Congress my time has been devoted to advocating pasteurisation in various parts of Europe.

For purposes of education I established a milk laboratory in Heidelberg and supplied with pasteurised milk the Children's Hospital of the University, as well as several charitable institutions.

In Sandhausen, a village in the district of Heidelberg, I repeated an experiment which I had so successfully made in Randall's Island, in New York, many years before.

In this German village of 4,000 inhabitants the death rate among children was forty-six per hundred. I established a pasteurisation plant there. The same milk as before was used: it was simply pasteurised. Without any other change in the diet of the children, the death rate began immediately to fall.

Here is a telegram which I received from the Burgomaster of the village before I sailed:

Nathan Straus, Passenger Cedric, Queenstown:

Since February 1, 1908, there died in Sandhausen eleven children under two years of age, against twenty-five for the corresponding months in 1907 and against thirty-two average for

the five preceding years. We use same milk as before, only pasteurised.

(Signed) FRANZ HAMBRECHT,
Buergermeister.

From Heidelberg I extended my activity to other cities, beginning in Karlsruhe. There I established a pasteurisation plant under the auspices of the Dowager Grand Duchess Luise of Baden. I also presented a plant to Dublin, Ireland, under the Vicereine Countess of Aberdeen. And let me say, right here, that a great deal of my European success is due to the active and moral support of these two good and noble women.

I also erected plants in Munich, under the patronage of Prinzess Arnulf of Bavaria, and in Liverpool, under the Officer of Health, Dr. E. W. Hope.

I made exhibitions which practically demonstrated the need and the benefits of pasteurisation in Frankfurt, Berlin and Vienna. Physicians, men of science, philanthropists, government and health officials, and hosts of plain good men and women who have the welfare of humanity at heart, visited these exhibitions and were unanimous in their praise of my work and my success.

The direct result of these exhibitions has been the spread of the knowledge of pasteurisation and its benefits. And the outcome will no doubt be the general introduction of pasteurisation in these cities and countries.

Baron Von Bienerth, Minister of the Interior of Austria, after visiting my exhibit in Vienna, promised to introduce the pasteurisation of milk throughout his country. To give impetus to the new work, I offered him a pasteurisation plant, which he accepted for the institution called "Des Kind." This institution was founded to commemorate the sixtieth jubilee of Emperor Franz Joseph's reign.

As the president of the Women's National Health Association of Ireland, Lady Aberdeen will exhibit in Washington at the Tuberculosis Congress, in competition for the prize offered to the organisation which has accomplished most during the last three years in the fight against tuberculosis.

Lady Aberdeen's secretary accompanied me to New York to study my method of pasteurisation at my new laboratory. She will report to Lady Aberdeen with the object of copying the work in Dublin.

The ball has been started rolling on both sides of the Atlantic, and the work is getting to dimensions which put it beyond the sphere of one man.

I owe a debt of thanks to the European press for the extraordinarily courteous treatment I received at their hands, despite

my being a stranger and a foreigner. They have been constant in their support and have kept the danger of infected milk, and the remedy, pasteurisation, untiringly before the public.

With the aid of the press I hope to keep up my campaign in the future.

I earnestly hope and expect that the time is coming when no human life will be uselessly sacrificed. Typhoid fever, diphtheria and scarlet fever count their annual victims by thousands. Summer complaint counts its child victims by tens of thousands. Let us hope that this useless slaughter will be stopped. But let us not only hope.

When we know that the majority of these deaths are caused by infection through milk, let us take the only practical means of rendering milk safe.

Let us pasteurise our milk supply. Let us have for our motto: medicines and hospitals are possible cures while pasteurisation is positive prevention.

THE EARLY DIAGNOSIS OF PULMONARY TUBERCULOSIS.

JOSEPH WALSH, Philadelphia, Pa., emphasises the importance of the early diagnosis of tuberculosis, and enumerates the best means of diagnosis. First we must seek the history of an exposure to contagion, in the family, in the occupation, and in the home of the patient. A history of enlarged cervical glands, pleurisy, hemoptysis, or fistula in ano is an indication of probable tuberculosis in the patient. Protracted cough, inability to take a deep breath without coughing, progressive loss of weight, gastric disturbances, and night sweats are positive indications of tuberculosis. A suggestive symptom is progressive pallor of the skin. General symptoms that are very important are evident *habitus phthisicus*, increased pulse rate, fluctuation of temperature, dyspnea, hectic flush, clubbed fingers, and bilateral dilatation of the pupils. Suggestive general symptoms are neuralgic pains, general lack of resistance, frequent chilly sensations, central or peripheral nervous disturbances, enlarged thyroid, and herpes zoster. Local symptoms that are diagnostic are change in percussion note with prolonged expiration and rales over limited areas. Very important are unilateral supraclavicular depression in inspiration, granular breathing, suppressed or muffled breathing at the apex, altered vocal fremitus or resonance, and atrophy of the scapular muscles. Suggestive are deep soreness on pressure, spinal curvature, lessened expansion on one side, lessened excursion of the diaphragm, and lessened excursion of the lung.—*Medical Record*, September 19, 1908.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

All communications, whether of a literary or business nature, books for review and exchanges, should be addressed to the editor 238 DELAWARE AVE., BUFFALO, N. Y

VOL. LXIV.

OCTOBER, 1908.

No. 3

Tuberculosis Exhibit at Washington.

WE have dealt with the Congress itself heretofore in these columns; therefore, in this article we shall handle briefly the antituberculosis museum connected with the Sixth International Congress for combating tuberculosis now in session at Washington. In the first place it is interesting to observe that almost every civilised country is represented in this wonderful museum, and nearly every state of this republic presents evidence of what it is doing to prevent or cure pulmonary consumption. A glance through the various rooms is sufficient to indicate that the prevailing idea, the underlying thought of prevention, is fresh air day and night, everywhere fresh air, sleeping or waking, and that fresh air is even more important, more necessary during the night time than in the day time. The devices for protection from inclement weather while the person is living in the open air are indeed many, and are such as to fit almost every purse. The poor and the rich alike are provided with whatever is needed to afford protection from high winds or low temperatures, according to locality and the stages of the malady that is being combated.

The exhibit, therefore, embraces a most interesting array of tents, shacks, cottages, and hospitals, some of which are full size and others being models, the latter applying to hospitals and cottages in particular. One tent, which appears to be about the size of the army hospital tent, say 14 feet by 16 feet, fitted up with necessary conveniences, in our view presented a most attractive appearance, and is the one we should choose for ourselves should it become necessary. But there is such a great variety of these "habitations" that all conditions as to cost and preference are completely provided for. Hospitals and sanatoria in every conceivable form and size, together with surrounding grounds are

exhibited in models, the wonder being that all these various miniature creations should find place in the museum.

It is here that all the important questions relating to the construction of new hospitals may be determined, new ideas obtained and the latest schemes in ventilation, drainage, lighting, heating, as well as the multifarious minor problems relating to buildings and grounds may be discussed and evolved. We were impressed with a bird's eye view of Switzerland, giving its mountains, valleys, lakes and rivers in relief, in the midst of which was the government sanitarium for consumptives. The entire German exhibit is attractive and its completeness is a subject of common remark.

The United States must not be overlooked in estimating the usefulness of the exhibit. The general government need not be ashamed of its display, nor, indeed, should such of the states as are making exhibits feel anything but pride in them. One of the striking exhibits is that of three models of tenement houses, made by the committee on the prevention of tuberculosis of the charity organisation society of the City of New York. The first is a block of tenements on the east side in which 2,781 persons live in 1,588 rooms without one bath and but 264 water closets. Only 40 apartments are supplied with hot water. There are 441 dark rooms, having no ventilation to the outer air and no light or air except that derived from other rooms, and 635 rooms getting their sole light and air from dark and narrow airshafts. During five years there were recorded 32 cases of tuberculosis from this block, and during one year 13 cases of diphtheria. In addition, during five years, there were 665 different applications for charitable relief. The gross rentals amount to \$113,964.00 a year. This block is not one of the worst in the city.

The second is a typical block of "dumb-bell" tenements erected in accordance with laws in force prior to 1901. The halls and 10 out of 14 rooms on each floor are dark and ill-ventilated, receiving their sole light and air from the narrow airshafts that give almost no light below the top floors. The third is a block built in accordance with the new law and is about as complete as modern methods of sanitation can make it. There is much food for thought here on the subject of tenement house construction.

There is much of interest and instruction in this museum; indeed, it is full of the most instructive object lessons regarding the prevention and cure of this most destructive malady, one that causes the death of nearly 15,000 persons annually in the State of New York alone, and this in spite of all the empire state is doing in the way of prevention and cure. There remains much

more to do. Let all who can do so visit this wonderful exhibit and take new inspiration, new courage, for the continuation of the warfare in the interest of the prevention as well as cure of tuberculosis.

One Medical College for Louisville.¹

THE final details of the merger of the medical colleges of Louisville have been worked out by the committee composed of Drs. J. M. Bodine, Chairman; C. W. Kelly, W. H. Wathen, T. C. Evans, L. S. McMurtry, J. B. Marvin, H. H. Grant, M. F. Coomes, H. B. Ritter and R. B. Gilbert.

By the terms of agreement the property of the Louisville and Hospital Medical College, located at First and Chestnut streets, and the Kentucky School of Medicine, on Sixth street between Chestnut and Walnut, is acquired. The City Council will be asked by the trustees of the University to appropriate \$30,000 for the equipment of the laboratories of the medical department.

The following officers were elected. Dr. J. M. Bodine, president; Dr. J. B. Marvin, vice president; Dr. T. C. Evans, dean, and Dr. P. F. Barbour, secretary. The Executive Committee composed of: Dr. W. H. Wathen, Dr. C. W. Kelly, Dr. L. S. McMurtry, Dr. H. H. Grant, the president and dean ex-officio members of the Executive Committee. The Auditing Committee is composed of Drs. H. E. Tuley, M. F. Coomes, H. B. Ritter, Purveyor, Dr. H. N. Leavell. Committee to take inventory of the laboratory of the three schools are: Drs. J. B. Marvin, E. S. Allen, B. J. O'Connor and H. A. Davidson.

The following major faculty was elected by the Commission: Drs. William Bailey, J. M. Bodine, Thomas C. Evans, William E. Grant, Henry A. Cottell, L. L. Solomon, Virgil E. Simpson, Henry M. Goodman, Edw. R. Palmer, Joseph B. Marvin, John G. Cecil, Richard B. Gilbert, Samuel E. Woody, William O. Roberts, Thomas L. Butler, J. Garland Sherrill, Argus D. Willmoth, Turner Anderson, Louis Frank, William B. Doherty, Henry Enos Tuley, J. Morrison Ray, Adolph O. Pfingst, Isadore N. Bloom, Charles W. Hibbitt, Bernard Asman, Isaac Lederman, Carl Weidner, Lewis S. McMurtry, Frank C. Wilson, Samuel G. Dabney, John Edwin Hays, H. Horace Grant, Philip F. Barbour, Edward Speidel, George A. Hendon, Walter F. Boggess, Ezra O. Witherspoon, H. A. Davidson, William H. Wathen, Martin F. Coomes, Henry Orendorf, Fouche W. Samuel, William A. Jenkins, John R. Wathen, George B. Jenkins, Arthur J. Boyd, Oscar C. Dilly, Ellis S. Allen, Curran Pope, Granville S. Hanes, Gay-

1. Louisville Monthly Journal of Medicine and Surgery, September, 1908.

lord Hall, C. W. Kelly, Irvin Abell, B. F. Zimmerman, H. N. Leavell, S. J. Meyers, B. J. O'Connor, Ellis Duncan and W. C. Dugan.

THE tuberculosis congress at Washington as was expected did little but get formally under way at the first official session held in the National Museum, September 28, 1908. Great results are expected from the conference ultimately and expectations will probably be in large measure realised. One important outcome of the meetings, says the *Buffalo Express*, will no doubt be dissemination of confidence that tuberculosis is not necessarily fatal and of the best ways in which to fight the disease. Confidence in the possibility of cure and realisation that the best methods of combating the plague individually are practically within everybody's reach should be of immense service to the world.

NEWS comes through the press despatches that a disease of the upper air passages, due to the forest fires, is prevalent in various parts of the country, particularly in New England. The patients have an itching in the throat which awakens them from sleep. This is followed by severe coughing spells, which ordinary throat remedies fail to stop. The entire throat structure is depressed and irritated similar to the discomfort experienced in tonsillitis.

It is expected, of course, that the ailment will disappear when rain puts out the fires and clears the atmosphere. Happily, the long desired relief has come at last, for as we write rain is falling in torrents, the atmosphere is cleared, and vegetation is reviving.

TARRANT'S Effervescent Seltzer Aperient is one of the most efficient and agreeable alkaline laxatives that can be administered in the therapy of rheumatic and gouty affections. It is a scientific preparation entirely within the bounds of ethical propriety, against which no taint of deception or fraud has ever been charged, and no suspicion has ever arisen. It is available in many kidney disorders and when given under the advice of a physician gives satisfactory results; so also in many other affections when appropriately administered.

FOR the first time in several years in this city the degree of Master of Pharmacy was conferred upon five distinguished men from different sections of the United States, who have attained distinction in the art of preparing medicines and drugs. Those who received this honor were Samuel W. Fairchild, of New York; Horatio Nelson Fraser, of New York; John F. Hancock,

of Baltimore; S. A. D. Sheppard, of Boston, and William McIntyre, of Philadelphia.—*Evening Bulletin, Philadelphia.*

PERSONAL.

DR. CARL TOMPKINS, formerly of Randolph, N. Y., has established his office and residence at 106 Elmwood Avenue, Buffalo. Bell telephone Tupper 1511, Frontier 408. Hours: 8 to 9 A.M.; 1 to 3 and 6 P.M. Dr. Tompkins also announces that he is prepared to do clinical laboratory work at his office.

DR. MAX BREUER, of Buffalo, who has been hunting in New Brunswick for several weeks, returned the first of October, and has resumed his professional practice at 33 Allen Street.

DR. DEWITT G. WILCOX, of Buffalo, made the principal address at the formal opening of the new surgical building of the Memorial Hospital at Niagara Falls, Thursday evening, September 17, 1908. Four nurses were at the same time graduated at the Training School attached to the institution.

SOCIETY MEETINGS.

THE Medical Association of Central New York will hold its forty-first annual meeting at Buffalo, Tuesday October 20, 1908, in the auditorium of the Historical Society's building, Delaware park. The morning session will open at ten o'clock, and the afternoon session at two o'clock. A program has been proposed by the officers and the following papers will be presented:

President's Address, Carlton C. Frederick, Buffalo; Diet in Typhoid Fever, I. H. Levy, Syracuse; The Surgical Idea in Obstetrics, Wm. Mortimer Brown, Rochester; Five Cases of Spinal Cord Tumor with Operations, Wm. C. Krauss, Buffalo; A Surgical Evening in Italy, Lewis A. Rose, Rochester; County Sanitary Associations and their Uses, O. J. Hallenbeck, Canandaigua; Senility—Its Symptoms, Approach and Treatment, J. Moyer Hagey, Mt. Morris; Guesswork in the Practice of Medicine, B. C. Loveland, Syracuse; Some Points in Abdominal Diagnosis, W. W. Skinner, Geneva; Further Research Regarding the Phosphatic Index or the Pulse of the Nervous System, J. Henry Dowd, Buffalo; Renal Decapsulation for Eclampsia, Wm. B. Jones, Rochester; Endothelioma of Bone Following Injury, G. W. Cottis, Batavia; Complications and Sequelæ, I. M. Slinger-

land, Fayetteville; Blastomycosis in New York State, Henry Clay Baum, Syracuse; A Case of Dermatitis Exfoliativa, Wm. A. Howe, Phelps; Chronic Cholecystitis with its Complications and Sequelæ, H. M. Spofford, Batavia; The Effect of High Frequency Currents upon Blood-pressure; Demonstration of D. Arsonval Cage, W. L. Conklin, Dansville; Fracture and Dislocation of Shoulder with History and Specimens of Case, D. M. Totman, Syracuse; The Prognosis in Achylea Gastrica, Allen A. Jones, Buffalo; A Few Clinical Reports, Henry L. Elsner, Syracuse; A New Method of Treatment of Chancroid by Means of Hot Air, E. Wood Ruggles, Rochester; Treatment of Eclampsia, W. L. Wallace, Syracuse; The Etiology of Chronic Deafness, W. Scott Renner, Buffalo.

The officers of the association are: president, C. C. Frederick, Buffalo; first vice-president, M. P. Conway, Auburn; second vice-president, A. A. Young, Newark; secretary, C. A. Greenleaf, Rochester; treasurer, Wm. M. Brown, Rochester. The local committee on arrangements are, William C. Krauss, chairman; A. A. Hubbell, L. Howe, C. G. Stockton and F. S. Crego.

The association covers all the western and central New York counties and has achieved a reputation for scientific work as evidenced by its annual volume of transactions. Physicians in general are cordially invited to attend the meetings.

THE American Dermatological Association held its regular annual meeting at Annapolis and Baltimore, Md., September 24, 25 and 26, 1908, when the following officers were elected for the ensuing year: president, William Thomas Gilcrist, of Baltimore; vice-president, William Allen Pusey, of Chicago; secretary and treasurer, Grover William Wende, of Buffalo. The next meeting of the association is to be held at Philadelphia, in May or June, 1909.

THE Association of Erie Railway Surgeons will hold its seventeenth annual meeting at the Hotel Statler, Buffalo, October 7 and 8, 1908. Several prominent members are listed for papers and a banquet will be held at The Statler on the evening of the second day. Dr. W. H. Mansperger of Buffalo has arranged clinics at the German Deaconess's Hospital on October 8th and there will be a special trolley trip to Niagara Falls and around the Gorge route, as well as an automobile ride about Buffalo.

THE American Association of Obstetricians held its twenty-first annual meeting at Baltimore, September 22, 23, and 24, 1908, during which the following named officers were elected to serve

until their successors are chosen: president, William Henry Humiston; vice-presidents, James E. Sadlier, Poughkeepsie, and John D. S. Davis, Birmingham; secretary, William Warren Potter, Buffalo (re-elected); treasurer, N. O. Werder, Pittsburg (re-elected); executive councillors, E. Gustav Zinke, Cincinnati, and Herman E. Hayd, Buffalo; also executive councillor, to fill vacancy occasioned by the election of William H. Humiston to the presidency, William A. B. Sellman, Baltimore. Next place of meeting, Fort Wayne, Ind., the 3d Tuesday in September (21), 1909.

THE third annual meeting of the eighth district branch of the Medical Society of the State of New York, was held at Batavia, September 22 and 23, 1908. E. E. Snow of Batavia presided. Papers were read by Drs. DeLancey Rochester and H. C. Rootli, T. H. McKee, C. A. Wall, N. G. Russell, James A. Gardner, James E. King, William C. Krauss, James W. Putnam and H. R. Hopkins of Buffalo.

The following officers were elected: president, E. E. Snow of Batavia; vice-presidents, Edward Munson of Medina and T. H. McKee of Buffalo; secretary, Lee M. Francis of Buffalo, and treasurer, C. A. Wall of Buffalo.

COLLEGE AND HOSPITAL NOTES

THE new free dispensary of the German Hospital, Buffalo, was opened September 14, 1908. The following medical and surgical staff has been appointed for the dispensary:

Medicine, L. Bradley Dorr, T. Hubert Wilson, Frank E. Hill; Surgery, J. G. Meidenbauer, James A. MacLeod, H. E. Braner; Gynecology, A. L. Weil; James Porter, Ray H. Johnson; Obstetrics, C. H. W. Auel; Diseases of the eye, William M. Mehl, Gustave A. Hitzel; Diseases of the ear, nose, throat, Francis M. O'Gorman; Diseases of the skin, F. W. Filsinger, Francis E. Fronczak; Orthopedics, L. H. Staples; Nervous diseases, Edward A. Bowermann; Diseases of children, R. C. Mehnert, Joseph Schweitzer, Albert Frey; Clinical pathology, N. K. MacLeod; Genitourinary diseases, William Gardner, Arthur Gibson.

FREDERICK COOPER HEWITT who died August 30, 1908, was the wealthiest man in Tioga County. He left an estate estimated to be worth over \$5,000,000. His will written by himself, leaves more than \$4,000,000 to various institutions, charitable and otherwise. Two million dollars is bequeathed to the New York

Post-Graduate Medical School and Hospital. The will stipulates that should any of his heirs attempt to break the will, he shall forfeit his inheritance, which shall then go to the Metropolitan Museum of Art.

BOOKS AND AUTHORS.

The Sexual Question. A Scientific, Psychological, Hygienic and Sociological Study for the cultured classes. By **August Forel**, M.D., Ph.D., LL.D., formerly Professor of Psychiatry at and Director of the Insane Asylum in Zurich, Switzerland. English adaption by **C. F. Marshall**, M.D., F.R.C.S., late Assistant Surgeon to the Hospital for Diseases of the Skin, London. Octavo, pp. 536. Illustrated. New York: Rebman Company.

Professor Forel in this work presents a careful philosophical treatise of the sexual question. He considers the subject in its relation to suggestion, money and property, to the external conditions of life, to law, medicine, morality, politics, political economy, pedagogy and art. As a result of his study he arrives at some utopian ideas on the ideal marriage of the future.

First, the youth of both sexes will have been thoroughly educated as to the meaning of the sexual appetite. They will speak openly on sexual subjects to their masters and parents and to their companions of the opposite sex. The ideal marriage will reduce useless luxury and conventional formality to a minimum. Servants will not have the same position in the families as at present. He believes in matriarchism. This he defines is the legal privilege of the management of the family conferred on the wife, who is in reality the center of the family.

There is much in this work to commend. But there is much with which many will disagree. For instance: of this country we find the following, "since the emancipation of negroes has caused domestic servants in the United States to become expensive luxuries, family life has to a great extent been replaced by life in hotels and boarding houses, and this has furnished another reason for avoiding conception and large families. The European race of North America will diminish and become gradually extinguished and will soon be replaced by Chinese or negroes."

After reading this on page 332, we must confess that our respect for the prognostics of the author diminished. For his facts and their presentation we have only praise.

J. W. P.

Diseases of the Nose, Throat and Ear. Medical and Surgical. By **William Lincoln Ballenger**, M.D., Professor of Otology, Rhinology and Laryngology, College of Physicians and Surgeons, of Chicago University of Illinois. Octavo, 896 pages, with 467 engravings and 16 plates. Lea & Febiger, Publishers, Philadelphia and New York, 1908. (Cloth, \$5.50 net.)

It is a genuine pleasure to examine such a book as this, one so filled with scientific material, one which constitutes a valuable

contribution to the literature of medicine. Its first notable feature is that it includes in its delineation the nose, throat, and ear in their entirety. Heretofore it has been customary for writers to deal fully, even amply with the nose and throat, but at most with the associated affections of the ear. Ballenger has introduced also the relationship of the eye to the diseases of the sinuses, though appreciative of the fact that the significance of this relationship is little understood. A marked feature of this work is the illustrations, many of which are original while all are well executed, making an instructive and clear exposition of the author's meaning and of his work. Especially is Dr. Ballenger interesting in dealing with diseases of the maxillary and accessory sinuses. Every laryngologist should possess the book.

BOOKS RECEIVED.

Diseases of the Skin and the Eruptive Fevers. By Jay Frank Schamberg, M.D., Professor of Dermatology and Infectious Eruptive Diseases in the Philadelphia Polyclinic and College for Graduates in Medicine. Octavo of 534 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1908. (Cloth, \$3.00 net.)

Gynecology and Abdominal Surgery. In two volumes. Edited by Howard A. Kelly, M.D., Professor of Gynecologic Surgery at Johns Hopkins University; and Charles P. Noble, M.D., Clinical Professor of Gynecology at the Woman's Medical College, Philadelphia. Large octavo volume of 862 pages, with 475 original illustrations by Mr. Hermann Becker and Mr. Max Brodel. Philadelphia and London: W. B. Saunders Company, 1908. (Per volume: Cloth, \$8.00; half morocco, \$9.50 net prices.)

Anatomy, Descriptive and Surgical. By Henry Gray, F.R.S., late lecturer on Anatomy at St. George's Hospital, London. New American edition, enlarged and thoroughly revised, by J. Chalmers Da Costa, M.D., Professor of Surgery and Clinical Surgery, and Edward Anthony Spitzka, M.D., Professor of Anatomy, in the Jefferson Medical College of Philadelphia. Imperial octavo, 1,625 pages, with 1,149 large and elaborate engravings. Lea & Febiger, Publishers, Philadelphia and New York, 1908. (Cloth, \$6.00; leather, \$7.00, net prices.)

Progressive Medicine, Vol. III, September, 1908. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M.D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, 285 pages, with 30 engravings. Lea & Febiger, Publishers, Philadelphia and New York. (Per annum, in four cloth-bound volumes, \$9.00; in paper binding, \$6.00, carriage paid to any address.)

A Textbook of Physiology. For Students and Practitioners. By George V. N. Dearborn, A.M., (Harvard), Ph.D., M.D. (Columbia), Professor of Physiology in Tufts College, Medical and Dental Schools, Boston. Octavo, 550 pages, with 300 engravings and 8 colored plates. Lea & Febiger, Publishers, Philadelphia and New York, 1908. (Cloth, \$3.75 net.)

General Surgery. By Ehrich Lexer, M.D., Professor of Surgery in the University of Koenigsberg. American edition edited by Arthur Dean Bevan, M.D., Professor and head of the Department of Surgery, Rush Medical College, (University of Chicago). An authorised translation of the second German edition by Dean Lewis, M.D., Assistant Professor of Surgery, Rush Medical College. Octavo, pp. 1041. With 449 illustrations and two colored plates. New York and London: D. Appleton & Co.

Fourth Annual Report of the Henry Phipps Institute for the study, treatment and prevention of tuberculosis. February 1, 1906 to February 1, 1907. Edited by Joseph Walsh, A.M., M.D.

Transactions of the thirty-fourth annual meeting of the Oregon State Medical Association held at Portland, Oregon, July 1, to 3, 1908. William House, M.D., secretary.

The Cure of Rupture by Paraffin Injections by Charles C. Miller, M.D. Small 12 mo, pp. 81. Published by the Author, 70 State St., Chicago. (Prepaid \$1.00.)

MISCELLANY.

THE State Civil Service Commission will hold examinations on October 17, 1908, for the following positions: Assistant in Clinical Psychiatry, Pathological Institute, \$2,000; Health officer for Wells, Hamilton County; physician, sixth grade for hospitals and institution, \$900, and maintenance; Veterinarian State Department of Agriculture and Health, \$5.67 a day when employed.

The last day for filing applications for these positions is October 10. Full information and application forms for any of these examinations can be obtained by postal card request to the Chief Examiner of the Commission at Albany. Charles S. Fowler, Chief Examiner.

THE United States Civil Service Commission announces an examination on October 21, 1908, at the usual places, to secure eligibles from which to make certification to fill a vacancy in the position of aid (male), in the Division of Physical Anthropology, U. S. National Museum, at \$50.00 a month, and vacancies requiring similar qualifications as they may occur.

FOR SALE

My residence, 189 Fourteenth Street, has been occupied by a physician for twenty years, and is well adapted for such purposes. Reasonable terms.

Address, DR. E. T. SMITH, 189 Fourteenth Street, Buffalo, N. Y.

BUFFALO MEDICAL JOURNAL.

VOL. LXIV.

NOVEMBER, 1908.

No. 4

ORIGINAL COMMUNICATIONS.

Sociological Medicine.¹

By JULIUS ULLMAN, M. D.,

Lecturer on Clinical Medicine, Medical Department University of Buffalo.

TO you, who are about to begin the sixty-third regular session in furtherance of study and the acquisition of knowledge in your accepted vocation, I desire to welcome you to a return of the friendly relations of teacher and student. You enter the University for purposes of education in the science of medicine and your teachers and instructors return to you, after several months of rest and recreation, to disseminate through you the old and the newer truths based upon observation and experience, for the elevation of our chosen profession of medicine and for the preservation and uplifting of mankind.

Robert Louis Stevenson once wrote concerning the life of the Medical Man: "The physician is the flower of our civilisation, and when that stage of man is done with, and only remembered to be marveled at in history, he will be thought to have shared as little as any in the defects of the period, and most notably to have exhibited the virtues of the race." It is such a tribute to the honor, valor and value of our profession which makes us proud of our heritage and anxious to feed upon the ambition, so unselfish, to further the welfare of mankind, by not only combating the enemies which nature has in store for us, but to teach the doctrine of the prevention of disease and the fulfillment of good will and happiness to mankind. See to it that by your zeal, endeavor and industry, within these walls, you show a desire to emulate those who have labored wisely and well without regard to personal gain, and often unheralded, for the perfection and elevation of the science of medicine and have demonstrated that the triumphs of sanitary science, surgery and medical progress are among the grandest of civilisation!

We hear it often said that our profession is overcrowded. This is true in a relative sense, but it is equally true in all vocations of life and applies only to him who is indifferent, selfish,

1. An address delivered at the opening of the sixty-third annual session of the Medical Department of the University of Buffalo, September 28, 1908.

and who lacks industry and perseverance. There is a place for all of us directly in proportion to the exertion which we make. Do not, therefore, be discouraged, for success is not always measured by the accumulation of material worldly stores, but by the greater value of reputation "rich in the inheritance which it leaves, pious in the example which it testifies, pure, precious, and imperishable in the hope which it inspires."

A number of months ago at a testimonial dinner given Professor Koch, the great medical scientist, Andrew Carnegie who has gathered, who has given away, and who has still more money than any other one individual, said that he would give all his worldly possessions for the immaterial wealth of many of the physicians then before him, and confessed that his money was a poor substitute for the beneficent science of an intelligent medical man.

In spite of widespread skepticism, intolerance and pessimism, the practice of medicine holds greater and more wonderful possibilities today for the benefit of humanity than ever before.

Would you compare the relief of disease today with that of three centuries ago? According to Billings, in 1594 for every 1,000 children born at least fifteen and often forty mothers died. Nothing was known of the causes and nature of childbed fever which followed the visitation of the doctors and midwives like a pestilence,—a disease "which closed the eyes just opened upon a new world of life and happiness, bowed the strength of manhood to the dust and cast the helplessness of infants into strangers arms"

Have we not cause for optimism when we have conquered through efforts of legislation ophthalmia in the helpless newborn, which caused the eyelids to redden and swell and yellow matter to exude and in a few days or weeks shut out forever light from a soul? So also smallpox which before Jenner's discovery of vaccination killed 1-10 of all the people on the globe and disfigured nearly twice as many more. In Prussia, where vaccination is compulsory there is but one death to every 300,000 inhabitants. Diphtheria, which is now cured, killed unrelentlessly. Fevers and dysenteries decimated villages and prisons and but little was known of their differentiation.

The death-rate today is but one half what it was as late as fifty years ago. The average duration of life of a Roman citizen was thirty years. In Geneva during the 16th and 17th centuries, it was not more than twenty years. Today, it is between forty-five and fifty years. With Osler, we ask how much pain and suffering has been saved and prevented by the medical discoveries of the last fifty years—that is, the use of anesthetics,

aseptic surgery, the control of epidemics and the beginnings of effective sanitation. It is difficult for the imagination to grasp the sum total of the good which has been accomplished in the alleviation of pain and suffering. The spirit of 1908 is a hopeful service in behalf of humanity.

In college work we have every reason to be hopeful when we compare the teaching of medicine today with what it was in the early part of the 19th century. The doctor in 1800 received all homage to what seemed to the layman in those days almost a supernatural superiority, a homage which to us seems somewhat absurd when we consider how he was educated to his work. The student was the pupil of his preceptor—a practitioner, who often had never seen a skeleton nor performed an autopsy. These men often were graduates of the University of Hard Knocks and thus had none of the advantages you are about to receive. We begin the sixty-third annual session with a history of an honorable career and remember those professors now dead whose names add luster to the history of medicine in the new world,—the elder Flint, White, Hamilton, Dalton, Miner, Moore and the elder Rochester.

America was formerly held in ridicule abroad for its medical courses in the colleges, and when you consider that the United States is said to have 48 per cent. of the medical schools of the world, it is not surprising that though among the number may be mentioned some of the best institutions of their kind, there still remains a goodly number which will soon be eliminated following the Huxley law of the survival of the fittest. Great progress has been made of raising not only the premedical requirements by the respective state boards but also in the increase of years of attendance and the lengthening of the semesters.

Our University, though not enriched by large endowments, has nevertheless kept well in the foreground of advance, as evidenced by the excellent work of its alumni in practice throughout the United States and by the high standing of its more recent graduates before the state examining boards. During the past year through the untiring efforts of our Vice-chancellor, we have witnessed the first step taken toward the founding of a Greater University of Buffalo. What was thought a phantasy will soon become a happy realisation.

Men formerly entered the ranks of the profession of medicine for selfish purposes of self aggrandisement. Medicine offered an easier livelihood than trades and for this reason our noble calling has in the past been open to sharp satirical attack. There has been an evolution in the ethics of our profession and an effort at a higher morale and in this evolution you must take part by every act and precept.

The proper study of mankind was man and he was studied even to the minutest individuality of the cell, thanks to the work of the immortal Virchow. The medicine of the past concerned itself with the diagnosis, pathology and treatment of disease in the individual genus, man. We practised individualism in our art and forgot to heed the study of collectivism. We studied the pathological processes in man but failed to pursue the study of pathological processes in mankind. Charlotte Gilman states that we are subject to a universal law—namely, that a power to feel implies a power to act. What feels can move and thus we are grown socially conscious. We can treat social conditions when we have mastered their pathology.

Primitive man was most affected by physical conditions. He had to adjust himself to the exigencies of climate, soil and animal competition. Modern man has to adjust himself to social conditions. He is most affected by governments, religion, economic systems and general customs. Like prehistoric man we are still decimated by wild beasts which, thanks to Loewnschoek, Koch and others, we are able to study under the powerful lens of the microscope, but our human progress is still retarded by social pathology,—ignorance, poverty, crime and disease. Society has long since mastered the difficulties of adjustment with physical conditions but cannot arrange its intersocial conditions. These social pathological conditions are not all essential to our environment, but are due to economic errors and superstition.

Benjamin Andrews (*The Duty of Public Spirit*) says, "We need a larger, heartier recognition of men's dependence upon one another and of the moral and religious duties springing out of this close relationship. No man can live to himself so none ought to wish to do so." G. Lloyd Morgan states that those animals living in close association, the animals which take greatest pleasure in society, best escape various dangers: while those which cared least for their comrades perish in greatest numbers. "We are one of another and should so regard ourselves. If one suffers, all are hurt. The true weal of one is a blessing to the rest."

In conditions of environment, people live wholly unlike,—such as wealth, personal attributes of mind or body, financial, social and political opportunities. In the deeper things such as conscience and consciousness, emotions of hope, ambition, love, pride and contentment, joy or sorrow and those elements of rest and unrest, approximate satisfaction or endless longing and in all that constitutes humanity, we are subject to the same laws. Sociology is, then, the study of social relations, the mutual dependence, the helpfulness of true reciprocal duties and obligations of

men toward men. In such a study, it is self-apparent how important becomes the activity of the medical profession.

MEDICAL SOCIOLOGY.

I have, therefore, chosen as the subject of my discourse to you this evening, Medical Sociology.

As anatomy, biology, physiology and pathology are the foundations of your studies they are but a correlation of other sciences belonging to our calling. If you would be proficient therapeutists, you require knowledge of pharmacy and must needs know botony. If you desire knowledge in malaria you must know not only the plasmodium of Leveran which produces it, but the life history of his host, the mosquito, the anopheles. If you would release mankind from many of the evils of which it now suffers, you must study the conditions under which these evils exist and knowing them by collective as opposed to individualistic effort, remedy them.

We have had sociologists in medicine before society demanded a special study of itself and its conditions. Moses was a statesman and sociologist, the wisdom of whose teachings are too often disregarded. Pinel when he loosened the fetters and iron bonds which bound those bereft of reason to the unsanitary madhouses, and treated them not as low and degraded criminals possessed of evil spirits, was a sociologist. Jenner, when he through vaccination gave life in place of death, Morton and Simpson in introducing anesthesia, Koch, Pasteur and Behring in bacteriology, Lister in demonstrating aseptic surgery, Reed and Carrol in showing the method of dissemination of yellow fever and Colonel Gorgas in demonstrating that it is possible to make Havana, and the Panama Canal zone safe for human life, are sociologists of whom we can be proud. Thus the physician has assisted in sociologic progress for by his efforts the world has advanced in the knowledge of the real nature of disease and its rational treatment.

Doctor Kime states that this is a sociologic age and we as a nation have reached that stage in evolution in which sociology is an important factor in our development. We must recognise sociological principles or become diseased physically, morally and mentally as we increase in wealth, population, and age. We are no longer a rural people but with the progress of inventions in steam, electricity, hydraulics, and machinery, there has been a wonderful increase in the resources of the country with its consequence of an entire revolution and rearrangement of our lives; thus the rapid intercommunication of travel between the most diverse countries and peoples has brought into prominence problems which are yet to be solved.

Sir James Paget defines as the healthiest nation the one composed of healthy men, who live long and vigorous lives, who in every part of their life wheresoever and whatever it may be, do the largest amount of the best work that they can and when they die leave healthy offspring. If then, we are to do the best work, we must have health and it is here where the science of medicine is the cog for the machinery of life well done. A community does not know the meaning of sickness except perhaps in an epidemic when all lives are threatened, nor does a community appreciate the value of work until it is lost.

Mr. Sutton, the Actuary of the Registry of Friendly Societies of England, has returns of many years of sickness and mortality among members of a very large number of societies and there is recorded the number of days men receive money when "off work." He deduces the average number of days' sickness per member per annum is 1 1/3 to 1 3/4 weeks for the male population and for the female population a fraction more. Among the males, then, a loss of 9,602,505 weeks per year and among the female population 10,502,761 weeks, hence for the entire population between fifteen and sixty-five years 20,000,000 weeks are lost by sickness. These people in good health earn good wages and salaries and do not include invalids, insane, imbeciles, idiots or habitual drunkards. These figures, then represent about 1/40 of the work done by the entire population between fifteen and sixty-five or in money 11,000,000 pounds sterling per week. Let us for a moment examine the loss occasioned by a preventable disease like typhoid fever. In England, typhoid with a mortality of about 15 per cent. destroys 4,000 lives; 23,000 recover. The average length of the disease is 10 weeks, so that 23,000 weeks are lost in work. This does not include the loss of happiness and welfare due to sickness.

Again, according to Hunter, the cost to society to prepare a man for usefulness is \$1,500. This is a grant from parent or state to a child which he is expected to repay. If in the state of New York for instance, 15,000 die each year from a preventable disease like tuberculosis, there is a loss of \$22,500,000 and with the cost of medicines, nursing, loss of labor, another \$16,000,000 may be added, so that it is computed that in the United States tuberculosis occasions a loss of \$330,000,000 annually and that the loss from preventable diseases reaches the stupendous sum of \$600,000,000 annually. Again, consider the loss of work throughout life from the sickness in early childhood. How many through disease in childhood brought on through no fault of their own are made more susceptible to diseases in later life, are crippled or permanently disabled and are made recruits for the army of poverty?

Blackmar, in *Elements of Sociology*, says the productivity of a community is determined by the labor power and the elements which tend to labor as a means to wealth are the strength, the ability, the happiness, and above all the physical well-being of the laborer.

As a nation we have as yet not attained the knowledge that wealth must be secondary to health. We are as yet not cognizant that the profits of the individual should be secondary to the life, welfare, and prosperity of the great masses of the people and that human life must be placed before property. Suppose that a study of the economics of human life just referred to were made in reference to crops or meat supply. (Thousands have been spent in stamping out cholera among swine, but not a dollar was ever voted to eradicate pneumonia in human). What a national calamity would be the cry! What rigid steps would be demanded of the government to stop the loss! There is an economy in preventive medicine of incalculable value to the state or community, but the lesson has not been learned. According to General Wood the discovery of the transmission of yellow fever resulted in the saving of more lives each year than were lost in the entire Cuban war. The reduction of the death-rate in New York City from 20 per 1,000 in 1903 to 18.75 per 1,000 meant the saving of 4,500 lives, the prevention of 10,000 cases of sickness. It saved the work of one or two great hospitals, it saved some wives from becoming widows, some children from being fatherless and it prevented some poverty.

The installation of a filtration plant costing \$7,000,000 in Pittsburgh has already decreased the number of deaths of typhoid fever by 100 annually. If a life is worth \$5,000 there has already been a saving of \$500,000 worth of human life a year, but according to Sedgwick polluted water by lowering the resistance of the organism is also responsible for two other deaths (pneumonia, bronchitis, malnutrition) for every death from typhoid, so that for every 100 lives saved from typhoid, 200 lives are saved from other diseases; therefore \$1,500,000 are saved in the year. Had Philadelphia in 1891-92 expended \$7,000,000 for a filtration plant it would have saved about \$22,000,000 in loss to hotel keepers, merchants, manufacturers, for the care of the sick, loss of time, expense of burial from a typhoid fever epidemic which it had on its hands.

As a nation we have no comprehensive health organization, our only federal guardian being the Marine Hospital and Public Health service which, to prove that wealth comes before health, is under the direction of the Secretary of the Treasury. The American Health League and the American Medical Association

are making a determined effort to have the government exert more paternalism regarding questions of health. It is proposed that a department be created in the cabinet to include the various departments of health now scattered promiscuously throughout various bureaus. The great contending parties have recognised this question and have introduced planks in their respective platforms. With a stimulus of sufficient force from the various medical bodies of the country, we may live to see this praiseworthy reform, but we have a Herculean task to perform in order to overcome the nearsightedness and the penny-wise-and-pound-foolishness of our lawmakers in continually grinding down appropriations for the good of the health of the community. We must awaken a social consciousness and responsibility in matters pertaining to health and sanitation. We must teach that there is an equality in matters of health as is now recognised in matters of law and that it is the duty of the government, federal, state and municipal, to bring about conditions of equality as to health. Why should the death-rate of the poorest class of workers be three and a half times as great as among the well to do? Nature demands that each and every being have pure air, pure water, and pure food and the government must enforce nature's law.

Samuel Hopkins Adams (*McClure's Magazine*, July, 1903), says that but one fourth of the State Boards of Health are actively efficient, the rest being honorary and ornamental. They are willing to work but have no appropriations with which to work. What an economical bearing state work may be is illustrated in the State of Massachusetts where by the issuance of antitoxin and vaccine the citizens of the state saved \$210,000 or \$74,000 more than the total appropriation of the department. I have previously shown what an enlightened health department, such an one as exists in greater New York or Buffalo, may do for efficient government of a city; through its sanitary bureau in the inspection of lodging houses, tenements, slaughter houses, theatres, through the compulsory notification of contagious diseases and hospitals for the segregation and treatment of same; through the inspection of foods and drugs; through fumigation; by the distribution of literature concerning diseases; also of antitoxin and by the work of its laboratories in the analysis of foods, milk, water, and the like.

It has come to pass that the freedom of an individual to neglect his own health and injure that of others is being gradually eliminated in the United States. Aside from his vocation in the diagnosis and treatment of disease, the physician must also be an educator because he forces people to supplant ignorance with intelligence, to elevate the ideals of life, and to force the conduct of society into new avenues of activity.

There are conditions which sap the vitality of a nation arising from individual errors and which of all others are potent for evil. They depend upon errors of individual life which multiplied by intuition and training and ignorance become the self-inflicted wounds of a nation. We must therefore seek to control the individual unit by an education of the masses. In this work we are confronted by the great obstruction of ignorance and superstition for the masses often receive twentieth century truths with receptive minds of the tenth century. The discourses of the bacteriologist and pathologist have little more than academic interest unless we can educate the masses. The medical profession has been taught the value of this course in the successful war now being waged against the Great White Plague. In this disease we are so far successful because we have thrown away the sham of medical exclusiveness and have made an alliance with nursing associations, social workers, clergymen, educators and philanthropists and thus, by similar methods, other preventable diseases may be conquered.

The mortality of infant life is appalling. It is due to the ignorance of the mother and is greatest in proportion to the condition of poverty and the density of population. It has been designated as the "slaughter of the innocents" and still by educating the mother in cleanliness and the proper feeding of babies many an infant can be saved. "A helpless infant is entitled to milk that gives, not takes life." Dr. George Goler, health commissioner of Rochester, N. Y., a graduate of this college, has reduced infant mortality in Rochester to such an extent as to call forth the admiration of the country, by having the municipality establish milk stations in that city for the free distribution of proper milk to infants. Nathan Strauss, through the establishment of his milk stations in New York city and abroad has proven himself one of the useful members of our civilisation.

The newspaper press has done much to hinder the progress of medicine in the past by its selfish and unethical alliance with purveyors of nostrums and quacks and by championing the cause of the misguided, such as antivaccinationists, antivivisectionists, and the like, but a new service is open to it in spreading into the homes of the poor and ignorant the gospel of truth in health matters; and so the school and the college must assist, and I am glad to note that a school of sanitary science will open its first session at Cornell University this year. Louisiana has a system of hygienic education by which hygienic institutes are held under the authority of the State Board of Health. These institutes are held before colleges, and high schools; by this means a great number of the populace are instructed in the prophylaxis and

nature of transmissible diseases. The movement is extended by the perfect correlation of the clergy of all denominations, educators, and educated persons with the health service of the state.

The schools should teach not only hygiene, and physiology, but social science and economics and the benefits to a nation of a moral and religious family life. As an example of this assertion, we would not need to concern ourselves with the question of alcoholism in its degradation of human kind and its production of poverty, if the hygiene of the body and the mind and the value of the soberness of life were taught. Richardson says, "If you ask what has produced such a marvelous vitality in the Jewish race, the answer is not due to a particular physique, but mainly from the necessities of his persecuted career that he has retained his vital capacity. In a word, he has been forced into soberness of life. His home was made more exclusive to him than to freer man and became the simple center of his earthly career. Thus, he was more temperate, more chaste, more attached and considerate to his enfeebled young and old of that center, hence more careful of tomorrow."

The doctor (meaning one qualified to teach—Webster), is therefore a minister, for his is the function to change the belief from a lower to a higher form, and to bring the conduct of society into the subordination of belief (Blackmar). As education will do good in the examples which I have described, there still is another example which occurs to me where it will prove of value. It is said that neurasthenia is a disease of the rich but it is equally encountered among the poor. When you consider the continuous daily grind of factory work, feeding a machine in the same manner day after day, there is little wonder that the brain under this never changing toil chafes and that the toiler becomes irritable and possessed of obsessions. Education, explanation, and advice will do more good than all medicines and we owe Du Bois much thanks for teaching us the value of good sensible talk.

From a sociological view point, perhaps, one of the most prolific sources of disease and crime has been the result of herding large numbers of families in tenements. Up to the time of the Tenement House Commission and the enactment of proper laws regulating the tenements, some of these houses were so thoroughly infected with vermin and filth that destruction seemed the only remedy. Some years ago, the municipality of Glasgow by the destruction of such houses reduced the death-rate from 55 per 1,000 to 14 per 1,000. It is estimated that in the tenements of New York city there are 370,000 dark rooms. People are thus deprived through no fault of their own but through errors

of living and the greed of landlords, of fresh air, and of sunlight, with the result of terrible infant mortality, consumption, bronchitis, pneumonia and a greater evil, that of crime and of prostitution and a sinking of the morals. Hunter says, "You rob children through the yardless tenement of play, their first and only occupation, and send them upon the street to learn vagabondage and prostitution, just because a community is selfish and thoughtless." We owe everlasting gratitude to Jacob Riis, that excellent sociologist and philanthropist, New York's most useful citizen, who has studied the pathology of mankind and has prescribed radical cures, for demonstrating in the great city of New York that it is better to spend money for playgrounds than it is to enlarge the reformatories and state's prisons.

In the fight against the unsanitary tenement, it is fortunate that Buffalo has a health commissioner who against heavy odds and political intrigues does not fear to hail the unconscious owner of the tenement into court nor to turn off the water supply until his recommendations are obeyed. It is true that individuals and owners of foul tenements resent by all legal means the elimination of the perilous conditions from which they make their profit.

There are questions which concern the physician and where he is called upon as an overseer in regard to education. The school is the only place where it is expected that inequalities and handicaps of home environment shall be obvious. It is the duty of the physician to determine whether the curriculum is too burdensome, whether the school-room is properly ventilated, whether the children attending the school are undernourished or rickety, whether or not they suffer from physical defects such as enlarged tonsils, astigmatism, and the like. Are there in our schools as in New York city 66 per cent. in serious need of medical dental or ocular care? Does the condition exist because of ignorance of the parent or neglect or indifference, or because of insufficient income? Children in parochial and public schools have the right to be examined and told their deficiencies and how to correct them.

Allen, in *Efficient Democracy*, says, "simplified breathing is more important than simplified spelling. They must be taught that a nose plus adenoids makes backwardness, that decayed teeth times ten equals malnutrition, that hypertrophied tonsils are infinitely more menacing than hypertrophied playfulness." Buffalo, I am glad to say, has this year for the first time instituted the medical inspection of schools. I have but one suggestion further to make, and that is that the municipality feed the undernourished children of school age. This is considered by such a writer as Spargo of more importance than the medical school inspection. The child of the inebriate, of the idler, and of the criminal must not be made to suffer for his parents' sin.

The state is often called upon to support at public expense as paupers the men, women and children brought into poverty through industrial conditions. Instead of building almshouses and lodging houses it were better to enact laws for industrial compulsory insurance against distress, disease, accident, and death, as now practised in Germany, or pensions for those workers who have reached 70 as now practised in England. "There is no other nation," says Hunter, "comparable industrially to the United States which is so backward in its knowledge, in its legislation, in its administrative machinery for dealing with unsanitary conditions in factories, mines, workshops, and in preventing those dangerous processes in industry responsible for so large a number of unnecessary diseases and accidents and deaths."

President Roosevelt, by the creation of a Homes Commission of which Brigadier General Sternberg is chairman and Professor George M. Kober, M. D., is secretary, has done an excellent service. As chairman of a subcommittee on social betterment Kober has recently published a noteworthy contribution on Industrial Hygiene. A list of occupations and trades dangerous to health is given, for it is desirable to know the relation of a person's trade to his health, the source and significance of the dangers and the possible means for the prevention and mitigation of their injurious effects. In the manufacturing and mechanical industries, for instance, millers, coopers, brewers, distillers and rectifiers, cigar makers, tobacco workers, painters, glaziers, varnishers, marble and stone cutters are dangerous occupations; indoor work and work involving exposure to irritating dust, poisonous vapors, extremes of heat and cold and abnormal atmospheric pressure are dangerous to health.

It is interesting that in this country, the first law as to safety and sanitation in factories was passed in 1877, since which time all the states and territories have enacted some form of labor or factory law. Children should be advised not to choose occupations inimical to health until such a time that they are thoroughly safeguarded. Is there any reason why consumption should claim 48.13 per cent. of the deaths of printers unless it be that the work is performed in an impure and dusty environment? Children should be also warned against those occupations in which the use of alcohol prevails and to seek outdoor rather than indoor work such as the sweat shops offer. Child labor, however, is a menace to morals and good citizenship. In the days prior to the invention of machinery, child labor was performed, but always under the eye of the parent and in the healthful home of the hamlet. This was the era of craftsmanship and this in a measure was educative. Child labor as now conducted from a national point of view is a waste of its most valuable asset—manhood.

With Hood we exclaim: "Oh, God, that bread should be so dear and flesh and blood so cheap."

According to the census of 1900 there were 1,752,187 children under the age of 16 years employed in gainful occupations. In the state of New York there were 76,000 children out of school in the twelve months covered by the census. The textile industries rank first in the enslavement of children. In the South about 20,000 are thus engaged while in the United States 80,000 are employed. In the manufacture of glass 13.45 per cent. of the total employed are children under 16. There are 25,000 boys employed about the mines as possible recruits for a future army of asthmatics and consumptives. There are 12,000 employed in the cigar and tobacco factories, 10,000 in wood-working industries and equal numbers in laundries, messenger boy service, canning factories and the like.

Females suffer by reason of factory life and this is true among the unmarried women. The Committee of fifteen speaks as follows: "It is a sad and humiliating admission to make at the opening of the twentieth century, in one of the greatest centers of civilisation that in numerous instances it is not passion or corrupt inclination but the force of actual physical want, that imperil young women along the road to ruin."

They urge as one of the fundamental policies to combat the social evil, the improvement of the material condition of the wage-earning class but especially of the young wage-earning women. But factory life is especially demoralising in married women because their houses are ill kept, their children neglected and their infants which should be at the breast improperly fed and nourished. Overwork and fatigue are predisposing causes to disease because of the accumulation of waste products in the blood and the wear and tear on the nervous system, both of which make the body more susceptible to disease. Thus, long hours and tedious work not only endanger the individual life but the many railroad accidents and deaths therefrom may be attributed to this cause which led the United States in passing laws regulating the hours of railroad employees.

As to the importance of sanitation in work shops, little need be said. New York state allows thirty-three distinct industries to be carried on in living rooms and there are 23,000 such factories in New York city alone. Dr. Annie S. Daniels says, "Every garment worn by a woman is found being manufactured in tenement rooms. This is also true with reference to articles worn by infants, also such articles as furs, cigars, pocketbooks, paper boxes, and the like. Often such articles are handled and stored in infected rooms." Of 150 families examined by Dr. Daniels, sixty-six continued at work during the entire course of

the contagious disease, for which she attended the families. Could a better example be provided for the necessity of compulsory notification of contagious diseases and the need of a municipal contagious hospital? Basenquet (quoted from Richmond *The Good Neighbor*) says, "If we will have nasty things, shoddy things, vulgar things, we are condemning somebody to make them. If we will have impossibly cheap things we are condemning somebody to work without pay," and so another body of laymen and laywomen is formed to overcome these evils. The Consumers League urges reforms in that the great department stores in their treatment of their employees, give them employment upon such terms as to enable the employee to lead a selfrespecting and moral life, and urges the purchaser to ask only for such underwear made under sanitary conditions and without child labor or sweat shop labor.

One of the reforms created during President Roosevelt's administration is the enactment of the Food and Drugs act of June 30, 1906. It was through the untiring work of the chief of the United States Bureau of Chemistry, Dr. Harvey W. Wiley, that these laws were enacted. But public opinion, which was lukewarm, was aroused through Upton Sinclair's book "*The Jungle*," which caused the passage of this law by an almost unanimous vote. The object of this act is to prohibit the interstate traffic in adulterated and misbranded food products and to forbid the manufacture and sale of such foods and drugs in the United States. The competition of trade and desire after gain led manufacturers and merchants to debase the quality of goods without changing their names. For instance, in the great slaughtering industry of the country it was found that oily and fatty parts of animals were worth less in the ordinary state than in the fat of milk when manufactured into butter, so that these fats were so treated as to sell for butter and in the same manner drugs and chemicals masqueraded under false names, as alum in baking powder and drugs injurious to health were added to foods as preservatives, all of which were injuring greatly the health of communities and especially the poorer people because of their inability to buy goods of better quality.

Since this law became effective, the products manufactured are vastly superior to what they were before. The habit forming drugs as alcohol, alpha and beta eucaine, opium, cocaine, morphine, chloral hydrate, cannabis indica and acetanilid can only be sold in pharmaceutical preparations when their name is plainly marked upon the labels, thus hundreds of nostrums which were formerly sold indiscriminately through flaring newspaper advertisements to the public such as Peruna and similar nostrums had their nature revealed to the consumer. There will be fewer drug

habits formed in the future than in the past. With the education the public is now receiving on the alcohol question, such as an article, "Alcohol and the Individual," by Dr. Harry Smith Williams, in October McClure's, it will not be many years before the hygiene of the body and the mind will overcome the necessity of the state control of this and similar traffics, and for the same reason the venereal peril will not have the danger which is now so apparent.

The lesson must be brought home to the people, that they are responsible for much of the disease and suffering, and so it is now important to study the relationship of home surroundings on disease.

Laws may decree the erection of sanitary dwellings, but these in themselves are of no avail unless the tenant observes ordinary rules of cleanliness and ventilation. A bathtub may be useful if the coal supply is stored in it, but the health of the community were better served if it were used for the purpose for which it was intended. According to Dr. Richard C. Cabot, in our dispensary and hospital we have not done all the efficient work possible because we merely located disease. "We take accurate aim but do not fire when we aim." Hence in every dispensary and hospital there should be a social service department working in conjunction and under the supervision of the physician to scatter and dislodge disease so accurately located by our diagnostic field glasses. It is now imperative in such diseases as tuberculosis and neurasthenia to fight the disease not only by drugs, but by pervention, education, and if need be by financial help in the home. Thus we call upon the nurse, the educator, the settlement worker, trained in the diagnosis and treatment of character under adversity, ministers and philanthropists to assist us.

Since October, 1906, there has been a social service department in Massachusetts General Hospital, efficient as will be seen by the fact that 2,124 cases were treated in 1905-1907, and under the direction of that excellent and useful citizen Richard C. Cabot of Boston. So successful has the work proven itself that similar departments have been started in the Johns Hopkins Hospital, Baltimore, and in Chicago. In Johns Hopkins the students have taken an interest in this service and it would be well if a similar service were to be started among the students here. The object of this work goes beyond the consultation in the dispensary or the ward of the hospital. It seeks change in diet, in environment and in general reform of the home life. The social worker acts as intermediary between the patients and the different organizations of the city which can be used for his welfare, and this field of work offers to physicians and students an excellent opportunity to learn through practical demonstration the value of socio-

logic knowledge in the field of medicine. Two years ago Dr. Theodore C. Janeway established a bureau for those handicapped by disease, such as the loss of an arm, by phthisis, rheumatism, deafness, and the like. Some persons entirely unfit for certain work by reason of physical defect may be useful in some other position.

No hospital inmate should be discharged until, through investigation it is found that his treatment can be followed up at home. It would be praiseworthy if some person in Buffalo, charitably inclined, would found a convalescent home where those discharged from the wards of hospitals could continue the advantage of treatment received at the hospital. The need of a link between the hospital and the dispensary and the patient's home and environments is obvious and has been in a measure supplied through the establishment of social service departments in Boston and elsewhere.

There are many important subjects which suggest themselves which I have omitted from discussion in this paper for lack of time, such as homes for defectives, idiots, imbeciles, epileptics and the insane, the treatment of the criminal, creches for the children of the poor working women, fresh air missions and gymnasiums for the reëducation of tabetics, spastic paralytics, and forest schools for the undernourished. It is a pleasure to me to have had this opportunity to call to your attention the relation of sociology to medicine in its present needs and future problems. It is especially gratifying because Buffalo by the establishment of the first Charity Organisation in the United States in 1877, was the first city to apply philanthropy scientifically, in that in dealing with the poor it relieved not only the present want but also found out and removed the causes of that want and restored to society persons thus assisted. So our work is not only to cure present disease, but to prevent it by overcoming all the conditions and many of the bad environments which nourish it. It is a social service and demands more than any other vocation a knowledge of all sides of human thinking, feeling, and acting. It is combined with politics, with economy, with psychology and with ethics. It is a work of the brain and of the heart, and thus in closing I quote Burns:

"Then let us pray that come it may,
As come it will for a' that
That sense and worth, o'er the earth,
May bear the gree' and a' that,
For a' that, and a' that; it's coming yet, for a' that;
When man to man, the world o'er
Shall brother be for a' that."

Municipal Contagious Disease Hospitals—Their Medical and Financial Importance to the Community.¹

By R. J. WILSON, M.D., New York.

Willard Parker Hospital.

IN considering questions of this kind we must have before us some example for illustration. I have taken as such example the contagious disease hospitals of the Department of Health of the city of New York that are under my supervision.

Their points of excellence can well be copied by other municipalities; their faults in construction and administration, when known, can be avoided. Some of these, both the good and the bad, I will call to your attention later in this paper.

Let us consider the medical importance of contagious disease hospitals from the following standpoints: first, the treatment afforded in them; second, the protecting influence of their rigid quarantine; third, their proper construction.

When we attempt to compare the treatment received by a patient at home with that received in a hospital, we are at once confronted with the question of home environment as compared with that of the institution. For the sake of argument we will grant that where good medical attention can be given and medicines, food and nursing are to be had as needed, the home is the better place for the patient. All sick persons, I take it, do better where they are best satisfied with their surroundings, and when they are taken from home to a hospital there is for a short time, a feeling of homesickness added to their other trouble. It so happens that the largest percentage of contagious disease occurs among that part of our population having the smallest amount of means, who are not able to give to the sick ones that amount of attention they really need and can not—on account of having to earn their daily bread day by day—protect their other children against infection.

You can compare, if you will, a tenement house apartment of three or four rooms in which are housed a family of five persons, with the clean and well ventilated wards of a modern hospital. In such a household the mother has the care of the sick child. Her day begins with the preparation of the early morning breakfast of the father, who, if allowed to work, must have this attention, then there are the other children to be dressed and cared for and kept away from the infection; the mother is in and out of the room where the sick one is at frequent intervals. She can not change her dress and use antiseptics in an intelligent way to protect her other children. The sick child, it is true, has

1. Read at the Buffalo Academy of Medicine, Tuesday evening, October 13, 1906

the mother's best care, but under the disadvantageous surroundings, this care is not as good as that afforded by a good nurse in a well regulated institution. In the hospital there is constantly on call the best of medical aid and the food and medicines are given with regularity. Sudden changes in the patient, and they come suddenly in contagious disease, are met at the onset and thus serious sequela are frequently avoided.

Let us consider here three of the most common of contagious diseases; first, diphtheria. What advantages does the hospital afford that can not be had in the home? There are croup cases that must be intubated; in the hospital there are experienced intubators capable not only of quickly and safely intubating, but what is much more to the point, know *when* intubation is indicated and when it is not. Unnecessary intubation is a useless and sometimes fatal operation for the patient, all of which is known and acted upon in the hospital.

How many physicians are there in this city would like to take the responsibility of intubating a case of diphtheria? How many physicians are there here who would like to assume the greater responsibility of leaving an intubated case at home where he knows that if the tube is coughed up, death will result if it is not speedily replaced? How many physicians are there who will assume the responsibility of holding croup cases out of a proper hospital and letting them die from neglect of a therapeutic which is so simple that not to take advantage of it seems almost criminal? I sincerely believe that intubation for croup should never be practised outside of a hospital unless the intubator can be called at a moment's notice and that well qualified trained nurses are in charge of the cases.

Diphtheria patients should have noses and throats regularly irrigated if they are to get the best modern treatment. This irrigation must be regularly and properly performed if we are to get the best results from it. I do not believe that proper irrigation can be had, except in a very few instances, outside of hospitals having good and specially trained nurses for this work. I make this statement only after having received many letters from hospitals, and physicians throughout America on the subject. If you need further evidence of the good effect of hospital treatment in diphtheria, compare the death-rate of Buffalo with that of Boston where over 60 per cent. of the cases are taken care of in the South Department of the Boston City Hospital. In Buffalo the death-rate being over 13 per cent., while in Boston it was less than 3 per cent. How can this wide difference be explained except by accrediting a great deal of it to the treatment afforded by the hospital. This seems logical, too, when we

consider that every indication for antitoxin and other treatment is immediately responded to.

The care of scarlet fever in a hospital gives the patient a better chance to avoid the painful and dangerous sequela that frequently accompany it. I refer to the joint, gland and heart lesions. With the beginning of convalescence too often at home the patient is allowed to get out of bed and roam around the house. In the hospital the patient is kept in bed, the temperature is watched, the urine is examined and every guard is employed to prevent these sequelæ. The same thing may be said of measles. By constant watching by trained observers the dangers of sequela are lessened.

As important as the treatment of the contagious disease case and its ultimate recovery is the means used to prevent the disease spreading through the community. The regulations of the Department of Health of the city of New York are such that contagious diseases can not be discharged from the hospitals until it is believed that the contagious period in the case has passed. For example, scarlet fever is held for a minimum period of thirty-five days, and longer if the case is still desquamating; measles for twenty-one days and diphtheria until two negative cultures are returned. Thus it will be seen that convalescent cases are not allowed to come in contact with well persons and the spread of disease is prevented.

I have already said that hospital environment is the proper kind for contagious diseases, but this depends entirely upon the construction of the hospital and the manner in which it is administered. The Willard Parker Hospital for diphtheria, in the Borough of Manhattan, is a good type for the care of that disease. The principal points in it, to which I wish to draw your attention, are the admission and discharge rooms and the dressing rooms off the wards. When a case is brought to this hospital it is taken into the admission room immediately. This room has in it a table for examination, a medicine closet, a washstand and a stand and tray for the intubation set. There is adjoining it a bath-room. This admission room is in duplicate, so that in the event of a mistake in diagnosis or a case of mixed infection having been admitted, there will be another room to use while the infected one is being fumigated.

When the case is received in the admission room it is examined, the diagnosis made or confirmed, the patient receives a proper dose of antitoxin, and if not very sick is vaccinated. Cultures are made from the nose and throat and smears from the vagina of female children and sent to the diagnosis laboratory.

It is taken into the bath-room, there divested of all its cloth-

ing and given a bath. It is then given an outfit of ward clothes and taken to the ward to which it has been assigned. The clothing worn by the patient on admission is sent to the disinfecting station there sterilised by steam and returned to the clothing room in the hospital where patients clothes are stored. When the patient is ready for discharge it is brought to the discharge room of the hospital, divested of its ward clothes, passes out of this room into a bath-room, which is situated between it and another room opening on the street. After receiving a bichloride bath and shampoo the patient passes into the room opening on the street, there receives its sterilised clothing, and after dressing is allowed to go out into the street as near aseptic as a human being can be made.

Off of the wards in the Willard Parker Hospital there are dressing rooms in which cases are extubated, or in which intubation is done when necessary. Taking cases into these rooms for these operations does away with a great deal of confusion in the wards that formerly accompanied them. Another feature of this hospital to which I wish to call attention is the stalls in the wards into which are placed the beds of patients suffering with broncho-pneumonia. These stalls are so arranged that ventilation is obtained without draughts. They are made of glass, so that nurses can see the patients at all times and from any part of the ward. It is probable that in the construction of a new building a series of small glass wards could be made that would be better than these stalls.

There is also in the Willard Parker Hospital a ward on the outside of the main building that is used exclusively for children that have vaginitis. Female children upon admission are sent to an observation ward until the report from the vaginal smear made upon admission is returned. This takes about an hour in the day time, but all cases admitted at night must be held until the following morning in the observation ward.

For the care of other contagious diseases, the Reception Hospital of the Borough of Manhattan offers a good type. This building is one story high, rectangular in shape, and has a solid partition running its whole length. It has five small wards on the north side and the same number on the south side. Each of these wards open directly into the outside air. There is not a hallway in the building. Each ward has its separate bath, lavatory and closet. There is a small area at the entrance to each ward, in which are kept the caps and gowns of the attending physicians and their assistants. This being an old building there are many things about it that can be improved upon, but the general principal is right. There could be glass partitions

so that one nurse could attend more patients. We have in the Kingston Avenue Hospital in the Borough of Brooklyn these glass partitions, but, unfortunately, patients can not be taken into or removed from the rooms which they divide without exposing and being exposed to other patients. Such a condition is entirely wrong and should be avoided by others who can profit by our mistakes.

An ideal arrangement in hospital construction for contagious disease would be to have a series of admission rooms, one for each day, so that all patients admitted each day could be held until after the period of incubation of the various infections to which they might have been exposed, and after this period had passed be sent from these rooms to the general wards of the hospital. Such rooms having glass partitions and constructed on the plan of the Manhattan Reception Hospital would not add materially to the cost of administration and would surely prevent a great deal of costly mixed infection.

Visiting being a necessary evil of contagious disease hospitals, especially where the cases are dangerously ill, provision must be made for the proper control of visitors; first, to insure that they will not bring new infection into the hospital, and, second, that they do not carry out of the hospital infectious organisms to other persons. The construction of the wards of the Pasteur Institute is particularly adapted for this purpose. The patients are kept in small glass rooms and the visitors are admitted to a corridor where they can see the patients but can not come in contact with them. Our present method in New York of allowing gowned and capped visitors to pass into the wards and come in actual contact with the patients is unscientific and without a single good feature to warrant it.

Let us now leave the purely medical side of this subject and consider briefly the elements that enter into the cost of caring for contagious diseases in hospitals that makes them more expensive than those for noncontagious diseases. First comes the cost of isolation. You may have but one case of a certain infection, but if properly cared for it must be put in a ward or room by itself and a day and night nurse assigned to it exclusively. In a hospital for noncontagious diseases this would represent nurses enough for ten cases if they were not seriously ill. Not only have we the cost of the nurses but also the ward helper; she cannot go from one service to another indiscriminately. Then there is the cost of caring for the various articles used in the rooms, the disinfection and sterilisation that must be constantly practised; the patient's clothing and the laundry must be sterilised and extraordinary care must be used in handling the infected articles that

have been in contact with the case. The isolation and care attendant upon it necessitates a much larger pay roll than is necessary in a general hospital, and of course, the cost of maintenance is in direct ratio to the size of the pay roll.

If it costs \$2.50 a day to care for a patient in a general hospital, and \$3.50 to \$5.00 a day to take care of a case in a contagious disease hospital, it certainly would seem that a contagious disease hospital was a very expensive proposition as compared with others; if it costs \$3.50 a day to take care of a case in a contagious disease hospital and only \$1.50 to take care of the same case at home it certainly looks as if it would be a saving investment to keep the case at home, and so it would if the expense ended with the care of the case but it does not and right there is the reason for having contagious disease hospitals.

Let us consider first the school time forfeited by children in a family where there is a case of contagious disease,—scarlet fever for example. Every child of school age in this family must be kept out of school for a minimum period of five weeks. Here you have a direct loss in money. In Buffalo, roughly speaking, the per diem amount paid for each child is ten cents, then for every child quarantined the direct money loss is about three dollars. Last year you had over 900 cases of scarlet fever: this cost you in school time lost \$2,700, this could not be avoided even if the cases had been cared for in a hospital but if there were say two other children of school age in each family, you had a total and unnecessary loss of \$5,400. You had nearly 3,000 cases of measles. The total loss to the city on the same basis would be about \$6,000. In this disease the quarantine is only three weeks.

Diphtheria with an average quarantine of ten days, would have cost you \$500. On school time you had in 1907, a loss of nearly \$12,000, which would go a long way toward maintaining a contagious disease hospital. But that is not the greatest loss, many of these quarantined children get so far back in their studies that they are obliged to take the whole course over again, and here you have the loss of a whole school year which is a trifle over \$30 in money lost to the city and infinitely more to the child, who has lost the time. Say that 5 per cent. of the children lose the whole year as a result of this quarantine, you have in scarlet fever alone a loss of nearly a \$1,000 dollars.

I fully recognise the fact that it is possible to make a great show with figures if you wish to prove your point. But here you have the facts to work on; every taxpayer in Buffalo ought to know what is the total amount paid out for schools; he can easily find out the number of children in the schools and the

cost of caring for each child; it is then easy enough to figure the loss in school time. I am making these estimates roughly but anyone here interested enough can get at the exact facts.

Besides the loss in school time, which can be figured pretty accurately, we have also to consider the loss through quarantine of business premises. In New York City a good percentage of cases in the contagious disease hospitals come from such places. If no provision is made to take care of contagious disease cases that occur in stores, shops, dairies, and the like, they must, of course, be closed during the period of quarantine. It is impossible to estimate the exact money loss of such quarantine. I can best illustrate it by calling your attention to one of many cases that came under my observation last winter. The Willard Parker Hospital ambulance station received a call in the late evening to remove a case from a house in one of the downtown streets. For some unknown reason this call was not immediately responded to and a few hours later I was appealed to by the father of the child to hurry up the ambulance and get the case. This man was a barber, occupying the ground floor of a business building; his shop being in the front and his dwelling in the rear. He employed several men, and made a living for himself and furnished employment to the others, so that his shop represented the earning capacity of several men. Now the regulations of the Department of Health of the city of New York, very justly, do not allow business to be continued while a contagious disease is in the same apartment. This business man told me that he must keep his shop open in order to meet his expenses. Hence his anxiety to get his child out of the house and into the hospital. I have no doubt that somewhat similar examples could be shown by going over the files of the Health Department of this city.

In New York city if every store and shop was closed where contagious disease appears, it would represent thousands of dollars of lost time of the persons employed in them. Under the conditions that now exist the children are taken to the hospital, the infected area is disinfected and within a few hours from the reporting of the case business is proceeding in the regular way. I might also say that people as a general rule do not care to trade in a store or send their children to it on errands, if they know there is a contagious disease on the premises.

In many instances the members of the family are not allowed to carry on their usual occupations if there is a contagious disease in the house. School teachers, dairymen, and the like, represent this class. Again, hotels and boarding houses must cease to do business while the case of contagious disease is present. All this represents a loss that can not be estimated, but it is a safe

guess that could it be calculated it would be found that the money thus totally lost would be sufficient to support a hospital that would easily take care of a like number of cases.

It is a fair proposition that in the long run a contagious disease hospital is a paying investment for any municipality. And right at this point I would like to say that there is no reason why there should not be paying wards and private rooms in the hospital. You will find that as people become more acquainted with hospital care they will be only too glad of an opportunity to pay to have their children sick with contagious disease taken to the hospital, and thus be relieved of the responsibility of preventing the spread of the disease in their own homes first, and then through the community while at the same time conscious of the fact that they are giving them the very best care that it is possible to command. While we have these examples of direct loss to the community as a result of no proper place to take care of contagious diseases, the establishment of a hospital means money saved through preventing the spread of infection and non-interference with the routine of business. You have all noticed that when people have been notified that a blast has been put in and is about to be exploded they keep out of the way and avoid injury. It is very much the same thing with the contagious disease hospital; the cases are all gathered together in one place, everybody knows they are in that place, and the people taking care of them make it a point to see that no contagion spreads from the hospital.

Last year a virulent attack was carried on against the Kingston Avenue Hospital for contagious diseases for a long time in an effort to have it removed from its present site. The argument used was that it was a menace to the health of the immediately surrounding community. Upon investigation it was found that there had not been a case of contagious disease within several blocks of the hospital for a long time and that no member of the families of the 200 employees had had contagious disease as a result of their working there, although at that time there were 500 cases of contagious disease in the hospital. What better argument can be given for the good to the community of a contagious disease hospital? Have your own records examined and find out how each case in families kept at home becomes the focus for several other cases. People walk in on these local cases unawares, tradespeople help to spread the disease, innocently it is true but none the less surely.

Every time a case of contagious disease is taken to a hospital it means that a focus for the possible spread of the disease has been removed. There is no way of estimating how much has

been saved to the community by this, but it is safe to assume that what is saved in one year would be sufficient to build and administer a hospital for that year and the savings of following years would be like an accumulating surplus.

In closing I wish to say a word about the social relation of the contagious disease hospital to the community. The old appellation of pest house, coupled with ignorance on the part of the people, has caused a tremendous amount of expense and distress. Pest houses bring to mind loathsome things, dangerous things, things to be avoided, things to be afraid of. Now contagious diseases are not loathsome and are not more dangerous, when properly administered, than other communicable diseases. It is our business as physicians to tell our clients this, always qualifying our statements with the caution of proper care; and in no instance can better care be had than in a well regulated hospital.

It is not necessary to hunt for some secluded spot for a hospital: on the contrary, it should be so centrally located that the ambulance calls would be the shortest possible. It does not help a very sick case to be transferred long distances by ambulance. Manage the contagious disease hospital right and it can be placed in the most densely settled part of the community without danger to anyone. Look at the Willard Parker Hospital, New York, in one of the most thickly settled parts of the city and one in which there is but little contagious disease as compared with some other parts of the city. A city the size of Buffalo without a proper place to care for its contagious diseases is away behind the march of civilisation both scientific and humanitarian.

A National Department of Public Health in Relation to the Antituberculosis Problem.¹

By CHARLES A. L. REED., M. D., Cincinnati, O.

(*Lancet-Clinic*, October 10, 1908.)

THE text of my address today is to be found in a few important facts. Tuberculosis alone causes the death of one hundred and forty thousand persons and the constant illness of two-thirds of a million more each year in the United States. The disease is preventable.

The United States today has no national public health agency vested with power competent to cope with the evil. Both of our great political parties have this year committed themselves to the creation of such a national public health agency, and yielding to

1. An address delivered before the International Congress on Tuberculosis, Washington, D. C., October 1, 1908.

the agitation inaugurated by Dr. C. G. Connegys, of Cincinnati, at the meeting of the American Medical Association in this city in 1891, and since continued by that organisation in connection with other organisations that have later joined in the movement, the President has signified his intention to bring to the attention of the Congress, at its session in December, specific proposals looking toward the correction of this unfortunate defect in our governmental organisation.

The object of my remarks is not to impress this great body of scientists from every quarter of the globe, for that is unnecessary, but through this body to impress the people of this country with the extreme importance of supporting these proposals, to the end that lives shall be saved, and that this shall be better done, that science shall be given due honor in the practical government of men.

THE GREATEST HUMAN ASSET.

In approaching this question let us remember that the basis, the very fundamental basis, of prosperity is the productive energy of the people. We have been hearing much of our natural resources. The soil, the mines, the waterways and the forests have each been enumerated as an asset. Yet each of them would be as worthless as the sandy stretches of the Sahara without the developing power of the greatest of all our natural resources—human labor and human intelligence. It is, therefore, the human factor, first, last and all the time that counts. Yet I am sorry to say that it is a factor that is taken all too little into account by our publicists when they assume to talk learnedly on the great problems of national economics. This, I regret to say, arises too much from the fact that, with them as with the people generally, human life has become a mere emotion, and not much of that, and almost without being recognised as a unit of value translatable into terms of dollars and cents.

Yet I am confident that the chief national legislation of the immediate future, as already indicated, will be based upon the fact that a man's energy is his best asset, and that its full value depends upon his health and his length of years.

SCATTERED NATIONAL HEALTH AGENCIES.

This movement is fostered not only by human and economic considerations, both of which I shall discuss at greater length later on, but by the fact, as already intimated, that the existing public health agencies established from time to time by our National Government, are insufficient and incoördinate and, to that extent and in consequence of that fact, are both unnecessarily expensive and disastrously inefficient in coping with this devastating evil.

In the first place, they are scattered throughout the various departments of the government. In consequence of this arrangement, or lack of arrangement, the Secretary of the Treasury is now the chief health officer of the United States. The Secretary of Commerce and Labor is in charge of the very fundamental basis of a health department,—namely, the bureau of vital statistics. The Secretary of Agriculture has the enforcement of the most important public health law that has recently been enacted, namely, that relating to pure foods and drugs, and likewise the bureau of animal industry. The Secretary of the Interior is the sanitary administrator of the territories, of the Indian tribes and of the great national eleemosynary institutions. The Secretary of War has charge of the sanitation of our insular possessions, including the Isthmian Canal Zone. The Secretary of the Navy and the Secretary of War, under the advice and direction of their respective surgeons general, are, of course, in control, as they ought to be, of the health of, respectively, the navy and the army. Many other instances might be given to illustrate the fact that our national public health agencies, considered in the aggregate, are in no possible sense connected with a coördinating center or under the direction of an intelligent and purposeful centralised administration.

THINGS DONE AND NOT DONE.

This would be a matter of comparatively little concern if the results were not literally disastrous to the people. It is true that there are many things that are being done, and being well done, to protect the people against unnecessary disease and death. Our frontier quarantine is reasonably efficient; our protection against plague and pestilence of foreign origin seems satisfactory; our immigration inspection is good; our pure food and drug administration is eminently satisfactory, while the sanitary triumph in the Isthmian Canal Zone marks an epoch in the protection of human welfare.

There are, however, many things that are not done under existing conditions, things that ought to be done and would be done if we had a properly organised national department of public health.

DISASTROUS WARFARE.

This is strikingly true of the great problem involved in the long, hard warfare here inaugurated in this country against an enemy, already encamped in our midst, more numerous than all the men in all the armies and all the navies of all the world in all the ages, an enemy that is triumphantly taking from the American people each year victims in death more than equivalent to

one whole army and two whole navies of the United States. This enemy is the tubercle bacillus. But where one dies of tuberculosis, many are ill—how many it is quite impossible to tell in the absence of information that could be gathered only through the instrumentality of a great national health agency, such as is now under serious advisement in governmental circles. I have been led to believe that the ratio of mortality to morbidity in tuberculosis is as one to five. If this is even approximately true, it follows that each year while 140,000 people are dying of this disease 700,000 are ill from the same cause. Invalidism induced by this cause is generally prolonged, varying from a few months to several years. One year is under the mean average duration of the disease. What does this mean? Statistics relating to a general condition spread all over three millions of square miles are not so impressive as if the same condition were concentrated and restricted to a more limited area.

SOME STRIKING ILLUSTRATIONS.

Let us say, then, that every man, woman and child in the State of Connecticut is stricken with this disease and remains an invalid for the space of an entire year, and that the deaths among them represented the entire population of New Haven with half the population of Hartford. Or let us imagine that Indianapolis or St. Paul or Kansas City had suddenly dropped off the map. The disparity in population between these cities and the deaths that occur annually from tuberculosis is not sufficient to destroy the force of the comparison for the purpose of an object lesson.

WHAT IS IT WORTH?

This sounds like strong language, it doubtless is strong language, but I challenge refutation of its accuracy. But strong as are the statements, startling as must be the illustrations, they will, I fear, fail to arouse action unless their meaning is expressed in dollars; it is not worth while to bother about the cents. In this computation our unit must be a human life. What is it worth? I am not asking the widow or the orphan. I am asking our publicists; I am asking the hundreds—yes, literally hundreds of lawyers in the Congress. But I ask them in vain. Their published utterances relate to money—always money—tariff money, railroad money, labor money, Standard Oil money, to all kinds of money except the money that is represented in the very life of the money-earner himself. On this they are silent. So we must begin for ourselves.

THE EQUIVALENT IN COIN.

A man's life is his capital; what he earns is the interest on his capital. Most states make 6 per cent. a legal rate of interest.

But make it 5, both for conservatism and easy counting. Then compute a man's wage, say a dollar and a quarter a day for 300 days in the year, as 5 per cent. on his capital. Then estimate on that basis the value of 140,000 lives lost—capital and interest—and the value of the time of 700,000 persons for one year, and you begin to grasp the colossal money phase of this question viewed in its strictly economic aspects. Of course, many who die from tuberculosis are dependents, many are non-producers, and many who are producers do not earn a dollar and a quarter a day, and many do not work 300 days a year. But it is likewise true that many, very many, of these victims have an earning capacity running high up into the thousands of dollars—from a single thousand up to half a million.

So it is probable that our units of computation are not far out of the way. But still to be conservative, divide the aggregate loss thus arrived at by two and again by two and you will still have enough left, which, if turned into the national treasury, would defray the running expenses of army and navy, build our coast defenses, improve our waterways, build the Panama Canal and pay the national debt long before our outstanding obligations mature.

STATE AND FEDERAL CONTROL.

In considering the question of a national department of public health in its relation to the control of tuberculosis one of the first conditions to be considered is the limitation, under the form of government, of the state and national governments, respectively, in the premises. It may be said that practically everything that is being done in the tuberculosis problem today is being done by the states by virtue of the police power reserved to them under the constitution. This fact, more than any other one aside from alcohol and popular apathy, is probably responsible for the comparative dearth of results so far achieved. In the first place the status accorded to sanitary authority in the states, as it is in the National Government, is very generally, but not always such as to give it neither educational value, moral force or adequate executive authority.

UNIFORM LAWS—A COUNCIL OF STATES.

The laws in the different states are generally inadequate, and, whether adequate or not, their complete lack of uniformity renders it impossible for the states to coöperate in the solution of a problem which, like this problem, is co-extensive with all the states. Like laws for like conditions is the first requisite for the control of any national necessity by state legislation. And like laws by the states will probably not be enacted to any great ex-

tent until, under the initiative of the National Government, the states shall send delegates to a representative body, a sort of council of states, which shall meet, as a legislature or the congress meets, in a session or sessions long enough to accomplish satisfactory results, and whose object shall be to formulate standard bills on various subjects and send them back to the legislatures for enactment. In this way, and in this way alone, can the states move with anything like satisfactory rapidity in meeting the crying demand for like laws for like conditions not only as relates to great sanitary problems, including the problem of tuberculosis, but relative to many other problems that concern the economic and social welfare of the people. This step should be taken without delay for, even at the best, considerable time must elapse before results from this means can be realised.

In the absence of some such effort on the part of the states, or even with such effort, but recognising that there is enough for both state and federal government to do, it seems to me that the congress, acting under the general welfare clause of the constitution, is competent to take charge of the situation. This principle was recognised by the conference of governors of the southern states, held only a few years ago, and has been adopted and acted upon by the general government as applied not only to maritime but to inland and inter-state quarantine of yellow fever. Acting on this principle and along lines parallel with those followed in the instances of yellow fever and the bubonic plague, it becomes entirely competent for the National Government, when necessary, to take charge of domiciliary sanitation, the absence of which is the one factor most responsible for the propagation of tuberculosis. The National Government has the only power competent to enforce sanitation of railway coaches and steamboats engaged in inter-state business, and of steamships touching our ports. The Pullman coaches, next to tenement houses, it would seem from a study of all conditions, are, probably, the most potent factors in the dissemination of tuberculosis. The federal government should have as much control over the migration of tuberculosis patients as over any other disseminators of a plague. The question of establishing great sanatoria on government land reserves, and of colonising them with tuberculosis patients from the crowded centers is another detail, but one that can be solved best probably by the coöperation of state and national authorities. And this reminds me to say that in all this great campaign the dominant idea must be that of coöperation rather than antagonism between state and federal authority, and that in every instance in which conflicting laws prevent such a consummation a way must be found by coöperative action to change the laws. This is not the land of the Medes, neither of the Persians.

A MATTER OF PRACTICAL LEGISLATION.

Then by all means let us have this dual plan of campaign against tuberculosis. Let us attempt, through a council of states, to secure uniform state laws touching this and other important questions. And let us have a strong federal public health agency with which to do the national side of the work. About this latter proposition it seems to me there ought to be no particular difficulty. The existing national public health agencies could be assembled by transfer from the various departments in which they are now located into some one of the existing departments and there organised, under authority of additional law on the basis of highest efficiency.

THE PARAMOUNT QUESTION OF STATUS.

I have said that these agencies should be assembled in some existing department rather than organised into a separate and distinct department with representation in the cabinet. I have said this because there appear to be sound executive reasons why the cabinet should not be enlarged. At the same time I must insist that the fundamental importance of this health movement, as shown by this congress, and by hundreds of other congresses and associations, demands that, for its fullest efficiency, it should be accorded the educational and moral force to be derived only from its titular recognition in the departmental scheme of our government. The two propositions are fortunately readily reconciled. This can be done by changing the name of the department in which the health agencies are assembled, thus avoiding the multiplication of cabinet officers. Thus, if it shall be found wise to make the bureau of vital statistics the nucleus for the aggregated service, the name of the department in which it is located could be changed to that of "commerce, labor and public health." Or if it shall be deemed expedient to select the department of the interior the name of that department should be changed to that of education and public health, which, unlike the present title would mean and stand for something distinctive among our great national interests. But I insist, in the name of the medical profession, in the name of science, in the name of humanity, that a great governmental agency to conserve, as this one proposes to conserve, more lives, more homes, more property, and more money, than any other single agency in the whole plan of government, shall be accorded a status befitting its dignity and its worth to all the people.

THE GROTON.

SOCIETY PROCEEDINGS.

Buffalo Academy of Medicine.

Report of the Commission of Five, appointed for the purpose of investigating the conditions in Buffalo in regard to the care of contagious diseases and the need of a municipal hospital for contagious diseases.

Your commission begs to report that from January 1, 1907, to December 31, 1907, there were reported to the Health Department of Buffalo communicable diseases as follows: measles, 2,388; scarlet fever, 1,324; diphtheria, 440; and the following number of deaths: measles, 46; scarlet fever, 59; diphtheria, 65; distributed through the different months as per attached table. There were per 10,000 inhabitants, measles, 60; scarlet fever, 33; diphtheria, 11.

At the present time there exists an epidemic of scarlet fever ever increasing and menacing the health and welfare of the community. Contagious diseases produce about 7 per cent. of the total mortality. The average mortality of scarlet fever is about 8½ per cent. In the Metropolitan Asylums' Board in London in 1890, with a total number of admissions of 10,343 the case mortality was only 2.97 per cent. The average mortality of measles in 12,273 cases admitted to the Glasgow Fever Hospital from 1870-89 was 8.8 per cent.

For diphtheria the London notifications for 1892 to 1897 show that more than one-third of the cases are under the age of 5 years, and rather less than a third are between the ages of 5 and 10. The mortality before the use of antitoxin was used 50 per cent. of the children under 5 years died. Since antitoxin is in use the London Fever Hospitals report for 1898 a mortality of 15.5 per cent. The complications arising from these diseases are varied and often so grave as to leave the child so disabled physically that he is unable to properly take up the struggle for existence.

We find that there exists a marvelous amount of ignorance among many of the community concerning the dangers arising from dissemination of these diseases. They are due to errors of thought which must be corrected:

1. It is considered by some that every child must sometime contract a contagious disease or infectious disease and, therefore, parents in many cases disregard all safeguards and in such diseases as varicella and measles invite infection.

2. The individual in his ideas of liberty, is of the opinion that it is his freedom to use his discriminating powers to neglect his own health and injure that of others; hence, in attempting to en-

force quarantine, the health authorities are always embarrassed because where infectious diseases occur in families of the working class the economic argument of self protection from dependence and possible pauperdom through weeks' loss of time in isolation of quarantine outweighs the community good and therefore cases proceed to spread the disease at a greater cost to the community.

The municipality of Buffalo requires:

1. The notification of every case of contagious and infectious disease. In many instances people in fear of quarantine, if sending for a physician allow their children to go unattended, thus a focus of infection may be ever present for the dissemination of disease.

2. When such cases are thus reported, the Board of Health placards the house, especially for variola, scarlatina, diphtheria (measles should also be placarded); quarantine is maintained; the patient and all living in the same dwelling are isolated.

The records from the inspectors of the Health Department show that it is the rule rather than the exception for quarantine to be broken. So menacing has this proven that Health Commissioner Wende was obliged to order the Police Department to enforce quarantine.

Your commission is of the opinion that an army of police officers requiring three shifts of eight hours each would be necessary to properly and adequately enforce quarantine.

There are at present five medical school inspectors whose duty requires them to check the spread of contagious diseases in the schools. At this time it is an every-day occurrence that contagious diseases are discovered in the schools and excluded by the inspectors, but the number of medical school examiners to perform the work outlined for them is a mere fraction of what there should be. (Chicago has 110; New York city, 150; Rochester, 12; as compared to Buffalo's 5).

As at present conducted, quarantine rigidly enforced without proper facilities for the segregation and treatment of communicable diseases is a hardship on the following peoples:

1. If a case of infectious disease necessitating placarding occurs where shop and home are in the same building, business is stopped and the source of income interfered with.

2. If a case occur in a boarding or lodging house, the house is placarded and the business ruined.

3. If a domestic employee becomes infected, the house in which such employee lives is quarantined, the children are not allowed school attendance and the business of members of the family is interfered with.

4. If occurring in the family of a char woman, her means of livelihood is stopped.

5. If occurring in the family of wage-earners, their means of livelihood is stopped.

6. If as so often happens, the disease develops in a tenement, its spread under conditions of crowding and unsanitary environment is great because the enforcement of quarantine is difficult and impossible.

7. Travelers and residents in hotels in the city of Buffalo are at once placed in a dreadful plight; they must leave the hotel within an hour's notice or the hotel is placarded; the law forbids them to hire a public conveyance without first notifying the owner of the conveyance for the purpose for which it is to be used; the law forbids them to leave the city, or to go upon the public streets or in public places; they are not allowed to receive visitors. The hospitals are, as a rule, crowded and have no room for them.

The Erie County Hospital can accept 8 cases; the Sisters hospital, 10 cases. The General Hospital contagious pavilion was condemned as unsanitary by the health department without making provision elsewhere for the number of beds put out of commission. The Children's Hospital can accommodate 10 cases, but only young children. There are, then, in the city of Buffalo with nearly 400,000 inhabitants accommodations for 18 adult cases or 28 cases including the children. It was recently demonstrated that if the Erie County Hospital is filled with 8 cases of scarlet fever that, necessarily, there is no room for diphtheria and the same is true of other hospitals in the city, for the reason that they are not on the pavilion system.

The conditions therefore at present existing in the city of Buffalo are intolerable, unreasonable and impossible for the general welfare and public good, because there is not in Buffalo, as in other cities of its size and importance, a hospital conducted by the city for the segregation and scientific treatment of contagious diseases.

What some other cities have done. Glasgow was the first city to establish municipal infectious hospitals. In Glasgow 9.79 persons per 10,000 of inhabitants can be treated for infectious diseases. In London, Eng., the first municipal fever hospital was opened January 25, 1870. There are now 17 such hospitals situated in every part of London giving accommodations for 9 persons per 10,000 of inhabitants. Up to October, 1903, 3,264,272 pounds were expended for land and buildings. In 1871, 864 cases of scarlet fever were treated; in 1903, 18,316 scarlet fever cases were treated.

In 1871 the annual mortality per 1,000 inhabitants from scarlet fever was 0.58; in 1903, .08. In 1888, diphtheria had a mortality of .32 per 1,000; in 1903, .16 per 1,000 of total inhabitants. So satisfactory have the municipal hospitals proven that at present in the city of London 80 per cent. of all contagious diseases reported are treated in the fever hospitals.

In 1862 Boston, Mass., erected the first municipal hospital in this country. Boston now has a model hospital for contagious diseases and its resident physician occupies the chair on infectious diseases at Harvard College. Boston has 3.85 beds for each 10,000 inhabitants. Buffalo 1 bed for 13,330 and New York city has the following hospitals for the treatment of contagious and infectious diseases: Willard Parker Hospital, 125; Scarlet Fever Hospital, 392; Riverside Hospital, 335; Kingston Avenue Hospital, 366; Tuberculosis Sanatorium at Otisville, Orange Co., N. Y., 264; Reception Hospital, 23. New York city also maintains a hospital and dispensary for the treatment of contagious eye diseases and three clinics for the treatment of persons suffering from tuberculosis.

In Philadelphia about 30 per cent. of contagious diseases are treated in the Municipal Hospital. The present hospital facilities have been proven inadequate and a new municipal hospital is in the course of construction and almost completed. This hospital is on a plot of ground of seventy-five acres and has widely separated buildings. The total cost of this institution when completed will be in the neighborhood of \$3,000,000.

Indianapolis is about to build a new contagious hospital at a cost of over \$75,000. The plans and specifications are not yet completed. However, it is the intention to divide it into separate buildings connected with a single administration building.

The city of Milwaukee operates two hospitals for contagious disease. Cleveland, O., has at present under construction a new contagious disease building which is about finished. The city also has a tuberculosis sanatorium connected with the City Hospital and also a sanatorium at the Cooley Farm in Warrenville, O.

Cincinnati, O., is about to build a municipal hospital which will be one of the finest institutions in the country. The following are the buildings with their cost of the contagious group as given the committee by the architects Messrs. Samuel Hannaford & Sons: power and laundry building, \$34,000; isolation and administration building, \$100,000; Ward O, \$55,000; Ward P, \$56,000; Ward Q, \$57,000; connecting tunnels and porches, \$15,550; total, \$337,500. This figure does not include heating and ventilating apparatus. The plans are here and from them you will readily see that Cincinnati has done Buffalo an excellent

service in showing us how to build such a hospital worthy of the name.

Baltimore is now building an infectious hospital. The buildings are grouped about the administration building, having separate wards for the sexes and races. It will be located a short distance from the city on a separate tract of land of twenty acres. It is contemplated to eventually erect separate buildings for each of the more virulent minor contagious diseases. Chicago has just inaugurated a hospital for scarlet fever, diphtheria, whooping cough and measles. There are four buildings so that isolation is complete.

St. Louis has a special hospital for contagious diseases at the City Hospital, situated in one corner of the block on which the entire group of hospital buildings stand. It is disconnected from all the other buildings and separated from the nearest by 120 feet, having a capacity of 150 beds. The class of cases treated are measles, scarlatina, diphtheria and erysipelas.

Minneapolis, Minn., has a contagious building having separate wards for tuberculosis, erysipelas, measles, scarlet fever and diphtheria. Capacity, 60 patients; cost, \$42,000. The hospital was a good one when it was built ten years ago but is out of date now.

St. Paul has a very fine contagious hospital. Pittsburg, Pa., has a municipal contagious hospital which in 1907 treated 602 cases and expended \$28,532.45. There are other municipal hospitals in many other cities from which we have not received answers to our enquiries.

Shortly after the appointment of this commission, the Medical Society of the County of Erie appointed a committee of fifteen of which Dr. John D. Bonnar is chairman. Both committees have coöperated and worked as one. Together we framed suitable resolutions urging the establishment and maintenance of a municipal hospital for infectious diseases and presented them to the board of aldermen, Monday, October 5, 1908. These resolutions were referred to the Committee on Sanitary Affairs, of which Dr. James S. Porter is chairman, and a public hearing will be held in the Common Council Chamber, Thursday afternoon, at 2.30 P.M., October 29. The commission, desiring to ascertain the conviction of the medical profession upon the needs of a municipal hospital for contagious diseases, sent out return post cards and we desire to state that such a hospital is considered a necessity by the medical profession by almost a unanimity of expression.

As the commission desires that the public at large should give expression of its opinion upon so urgent a question and should be represented at the public hearing, we have addressed letters

to various large and important bodies, such, as the Chamber of Commerce, the Manufacturers' Club, the East Side Business Men's Association, the City Federation of Women's Clubs, and the like, and express pleasure at the hearty responses of coöperation. We invited the mayor, the board of aldermen, as well as representatives from these organisations to avail themselves of the privilege of hearing the address of our guest, Dr. Robert J. Wilson, who so magnanimously has placed himself at the disposal of your commission and the Buffalo Academy of Medicine.

The commission therefore comparing the present necessities of Buffalo, after a study of similar conditions in many other cities, urges the importance of the establishment of a municipal hospital for contagious diseases for 250 beds for the following reasons:

1. Such a hospital effectually removes the focus of infection and prevents the dissemination of other centers of infection.
2. The person affected is under medical supervision.
3. The precautions necessary to fully isolate a case from its inception to the termination of the disease require a vigilance not known to the layman or the general practitioner.
4. It allows the wage-earner to maintain his position.
5. It does not deprive the mother of her duties as house-keeper.

6. It permits the children not diseased in an affected family to attend school, provided the diseased is removed to the hospital and the place disinfected.

7. The mortality rates in hospitals is less than in the homes and the dangerous complications requiring instant treatment (tracheotomy, intubation) more readily attacked.

8. In hospitals not treating infectious or contagious diseases, it gives them a place for the immediate isolation of the patient. (The Municipal Hospital of Philadelphia cared in one year for 178 cases transferred from other hospitals in the general wards of which the disease developed.

9. Hotels, tenement houses, apartment houses, lodging and boarding houses, and homes where shop and home are combined, need not be placarded provided the patient is removed to the hospital and the apartment disinfected, thus business as formerly threatened with ruin and destruction may continue.

We submit this report in the hope that the Buffalo Academy of Medicine will use every means at its command for the establishment and maintenance of a municipal hospital for infectious diseases, and urge each member to be present at the public hearing, Thursday, October 29, at 2.30 P.M., at the council chamber.

JULIUS ULLMAN, Chairman
GROVER W. WENDE,
ROBERT F. SHEEHAN, JR.

ALLEN A. JONES,
DEWITT H. SHERMAN,

Joint Action of the Medical Society of the County of Erie and the Buffalo Academy of Medicine.

To the Honorable, the Board of Aldermen, of the city of Buffalo:

We, the undersigned, being representatives of the Medical Society of the County of Erie, and the Buffalo Academy of Medicine, appointed for the purpose, do hereby petition your honorable body to take immediate steps for the establishment and maintenance of a city hospital for infectious and contagious diseases. The reasons for this request are as follows:

First.—During the year from July 1, 1907, to July 1, 1908, there occurred in the city of Buffalo, the following number of cases of contagious diseases: measles, 2,388; scarlet fever, 1,324; diphtheria, 440; and the following number of deaths from measles, 46; scarlet fever, 59; diphtheria, 65; distributed through the different months as per the attached table. There were per 10,000 inhabitants, measles, 60; scarlet fever, 35; diphtheria, 11.

Second.—The present hospital facilities in Buffalo for receiving such cases are utterly, woefully and totally inadequate—the Sister's Hospital being able to accommodate but 10, the Children's Hospital, 10 (their charter does not require them to take contagious diseases, and their beds are only for small children), Erie County Hospital, 8. These, we believe, are the only institutions which will receive these cases and none of these are arranged on the pavilion system, so that the care of different kinds of contagious diseases at the same time is dangerous. These accommodations give a total capacity of 30, or one bed for every 13,330 inhabitants.

Third.—Glasgow has hospital beds for contagious diseases 9.79 for every 10,000 inhabitants; London, Eng., has 9; Boston has 3.85.

Fourth.—When so quarantined, social or business relations are either entirely suspended or greatly diminished. While such quarantine, if strictly enforced, is of the greatest value to the health of the city at large, and, therefore, should not in any way be interfered with, still it is broken unless enforced by a large number of police, to the detriment of public health, as in the present epidemic of scarlet fever. It is a hardship which will be to a great extent obviated by the establishment of such a hospital. For example, if a case of such infectious disease occur in a hotel or boarding house, such hotel or boarding house must be quarantined and placarded; if a domestic employee comes down with such disease, the house in which such employee lives must be quarantined, and the children of the family interfered with. Some families have the shop and home in the same building, in such case, the business would be entirely stopped and the source

of income ceases. If such case occurs in the family of a woman who goes out to work, her means of livelihood is stopped, and many times a physician is not called for fear of quarantine, resulting in the spreading of the disease. If such case occur in a tenement house, the spread of disease is enormous and the impossibility of proper quarantine is evident.

Fifth.—The results of treatment of these cases in hospitals are much better than in private practice, both as to diminished death-rate and in fewer serious sequels.

Sixth.—As a result of removal of such cases to hospitals, sources of infection are removed from the people and a fewer number of cases occur in the community as proven by statistics of those places where such institutions exist—notably in Glasgow, Scotland; London, Eng.; Boston, Mass.; and New York city. The figures for these places, before and after the establishment of these hospitals, are at hand if desired.

With these facts before you, we believe it unnecessary to present any prolonged argument as to the necessity of taking steps for the immediate establishment of such a hospital.

Committee of the Medical Society of the County of Erie on necessity for a city hospital for infectious diseases:

JOHN D. BONNAR,
HERMAN E. HAYD,

DELANCEY ROCHESTER,
LAWRENCE G. HANLEY.

Commission on contagious diseases and municipal contagious hospital, of the Buffalo Academy of Medicine:

JULIUS ULLMAN,
DEWITT H. SHERMAN,
ROBERT F. SHEEHAN, JR.

ALLEN A. JONES,
GROVER W. WENDE,

Action of the Esculapian Club.

WHEREAS, The hospital facilities in the city of Buffalo for the care and treatment of contagious diseases are inadequate and a menace to the health and welfare of the community; and

WHEREAS, We, the members of the Esculapian Club, have frequently been embarrassed in our treatment of contagious diseases and our patients have suffered through a lack of proper hospital accommodations: therefore

Be it *Resolved*. That the Esculapian Club commends the efforts now being made by the Buffalo Academy of Medicine and the Medical Society of the County of Erie for the establishment of a municipal contagious hospital, and that we heartily favor the establishment of such a hospital;

Be it *Resolved*, That copies of these resolutions be sent to both the above named societies, his Honor the Mayor, the Presi-

dent of the Board of Aldermen, the President of the Board of Councilmen, and the President of the Common Council.

Unanimously passed September 17, 1908.

GEORGE B. STOCKER, M. D., Secretary.

The regular stated meeting of the Buffalo Academy of Medicine held in the Academy room of the Buffalo Public Library, Tuesday evening, October 13, was devoted exclusively to discussion of the subject of a Municipal Hospital for infectious and contagious diseases

DISCUSSION.

Dr. Ullman, chairman of the committee, appointed some months since to investigate this subject, which has been acting in conjunction with a committee of fifteen from the Medical Society of the County of Erie presented an exhaustive report, from which it was only too apparent that Buffalo, as compared to other cities of its size and importance in this country and abroad is lamentably behind the times in its efforts, or rather lack of effort, to care for those suffering from these diseases.

The chief paper of the evening was presented by Dr. R. J. Wilson, superintendent of hospitals for infectious and contagious diseases of New York city. Dr. Wilson, aside from all humanitarian considerations, showed the serious economic loss suffered by the city, as well as the unfortunate victims of disease, where whole families and sometimes several families were unable to follow their usual avocations during several weeks of quarantine.

Dr. Gram, by special request, illustrated the tack-card system in use by the Buffalo Board of Health for the purpose of recording the location of various infectious diseases. The impression made upon his audience, especially by the cards representing deaths from scarlet fever and tuberculosis was most profound. One needs to see the impartial distribution among rich and poor, sanitary and unsanitary, to have brought home to him in a personal way, his relationship to these devastating and preventable diseases. He also read the following letter from Health Commissioner Wende. See letter p. 220.

The discussion of the reports and papers was opened by Dr. DeLancey Rochester, chairman of the sub-committee from the Medical Society of the County of Erie, which has been acting in conjunction with the committee from the Academy of Medicine. Dr. Rochester very briefly reinforced the arguments of the previous speakers in regard to the great necessity for a municipal hospital for the care of infectious and contagious diseases. He explained that it should be limited to certain diseases only, such as scarlet fever, diphtheria, measles and erysipelas. He wished it to be particularly understood that Dr. Wende in his letter did not intend to associate tuberculosis with the disease mentioned, but that there should be a separate institution; that while we are considering the necessity for the scientific care of other infectious diseases, we should not lose sight of the "Great White Plague";

that the city should provide adequate means for the treatment of its own tubercular patients. There is only Raybrook, crowded to the doors and with a waiting list of over two hundred, where the tuberculous poor of the state of New York can find accommodation. Erie County Hospital is also overcrowded, and always has many advanced cases, which exert a very seriously depressing effect on those of an incipient character. He emphasised the fact, brought out by Dr. Wilson, that a hospital for acute infectious diseases should be located near the center of population; that instead of being a danger to its neighborhood, the history of such institutions in New York and Boston prove that it tended to curtail the occurrence of these diseases in its immediate vicinity.

Col. Haffa, chairman of the board of aldermen, declared that he was fully convinced of the necessity for such an institution in the city of Buffalo. He quite agreed with Dr. Rochester that a tuberculosis hospital should be built. Dr. Gram's cards had been the most convincing evidence ever presented to him; and he trusted that they would be brought before the Board of Aldermen at the public hearing which would be given at 2.30 P.M., October 29.

Dr. J. G. Bonnar, chairman of the committee on contagious diseases of the Medical Society of the County of Erie, on behalf of his committee expressed his obligation to the various civic bodies who had manifested their interest in the subject by sending delegates to this meeting. He also raised an earnest plea for harmonious action on the part of all concerned in order to accomplish this great good in behalf of sufferers, who were in no way responsible for the great inconvenience and suffering they were compelled to bear, under the present existing conditions.

Alderman F. J. Eberle expressed himself as very heartily in accord with all that had been said on the subject.

Dr. Sigmund Goldberg, delegate from the East Buffalo Business Men's Association, said that they had had a two hours' discussion of the subject, and that it was the unanimous desire of the organisation of nearly one thousand members, that he should represent them before the Board of Aldermen, and expressed their opinion and most earnest desire that this necessity be consummated as early as possible.

Mr. Edward F. Dold, delegate from the Manufacturers' Club stated that they had a meeting last Tuesday, when it was unanimously decided to send a large committee to the board of aldermen on October 29 in behalf of this movement. They considered an institution of this sort a very great necessity.

Dr. Mary Denton assured the members of the Academy that the Federation of Women of Buffalo would give them their very hearty support, and that they might count on their presence in large numbers at the hearing on October 29.

On motion of Dr. Rochester, the report of the commission

was unanimously adopted, and it was continued with power to act further in the establishment of such an institution.

DEPARTMENT OF HEALTH.

MUNICIPAL BUILDING,
BUFFALO, October 12, 1908.

To the Committee of Contagious Disease Hospital, Buffalo Academy of Medicine:

Gentlemen: In considering the existing necessity for contagious disease hospital, the fact is referred to that since the organisation of the Department of Health, the establishment of such institution has been part of the official program, its steadily increasing want emphasised and provisions for its establishment continuously recommended.

Throughout Dr. Greene's administration, it was likewise continuously advocated and has continued to be so up to the present time. Failure to secure provision for it has been a constant serious drawback and has deprived the municipality of the most important factor in contending with and diminishing contagion; for the contagious sick, which should now receive hospital care, have of necessity to be left scattered throughout a populous community under conditions where protection is difficult, and dissemination, to say nothing of the humanitarian side of the question. It is only necessary to look over the field to which it would administer, to emphasise the urgent want.

Among the poorer classes, a visitation of contagious sickness means unexpected, unprepared-for expense—often causes concealment with resulting certain spread of disease, for publicity too frequently means loss of work and finally increases the demands on the Poor Department.

Buffalo, in its rapidly growing state, has a large transient population, residing in all grades of rooming houses, minor boarding places and where not. A visitation of contagious diseases among this class means hardship and suffering, economic loss, and, again, often concealment and spread of contagion, and the like.

During the year, thousands of strangers and visitors, are with us. They come from no class. Sickness is no discriminator. Whether in hotel or private house, the problem is again presented, and it is often from the stranger with us that the just criticism is made that, in a city of almost half a million, there is lack of provision for the contagious sick, and in this the municipality is morally and otherwise responsible. Irrespective of the environment or status of these cases, money, loss of work and hardship are accompaniments. Suffering is greater, mortality is higher, concealment frequent, and spread of contagion more or less inevitable.

Buffalo, has for years, enjoyed particular prestige in being foremost and aggressive in all measures for the Public Health—as evidenced, notably, in its public baths, laboratory work, food and milk surveillance, special investigations, rapid service, procedure and the like. The lack, however, of the most important factor in combating contagion—and hospital for their care and segregation—has brought it to a standstill, invited just criticism, that this city, with its large population, is behind the times, behind lesser municipalities in an equipment, the necessity for which permits no discussion; which is essential and which the want of, directly and indirectly, is the cause of suffering, sickness, death, want and economic loss. This reference would be incomplete were not the indication equally strong, the data and possibilities the same, the lack of means to combat the infection and care for the sick the same, in tuberculosis.

At no time has the public throughout the country been so well informed, interested and exacting as to means for its protection from and for the durability of the scourge of the race as now. Never has scientific work been more available in obtaining practical results, never activity more aggressive and expenditure more liberal, and durability and disseminations demonstrable. Of the many phases of the problem its treatment and cure is uppermost in the field of endeavor by nation, state and cities, and provision for exterminating this White Plague are established and being established on all sides. The position of the consumptive in our midst is most pitiable. With a knowledge that curability is a fact in its incipency, there is no provision that he can readily avail himself of, and hope is darkened.

With the advanced case it is yet more sad. Being undesirable cases, hospitals are loath to receive them, for they are obliged to mingle with other sick, with all that it implies. So that from inadequate provision, the curable cases cannot get the facilities, while the incurable, pitiable as it is, unwelcome in our hospitals, and too frequently unwelcome at home, words cannot portray the mental despair and anguish in both classes of cases. The relation of general hospitals to this disease is unfortunate. Being unfitted to receive and treat them, they should not be admitted, for their admission means mingling with other patients with all that it implies—notwithstanding which, and that they are undesirable cases, they are perforce obliged, on occasions to accept them, though with results that are unfortunate, as has been recently demonstrated in our own city. In considering the question of hospital equipment, it is again urged that provision for tubercular patients be included. It is recommended that, for the curable incipient ones, hospital facilities with out-door treatment on the now accepted principles, be provided beyond the city limits; while, for the incurables, those who are and should be debarred from general hospitals, and who are not desired in the home circle, and who are constant sources of infection in our midst, a specially adapted institution should be organised. Until we do this, we must continue to pay the penalty, be the subject of just criticism.

be behind other municipalities and be conscious of not doing our duty to the public and the sick.

In closing, no time need be occupied with the committee or profession in referring to the fact that while we have a smallpox hospital it in no way has any utilitarian bearing on the situation. Its distinctive character for strict isolation and treatment of pestilential disease, with which no other sickness can be even remotely assembled, are sufficient.

The recommendation, therefore, for a contagious hospital includes also that for the tubercular.

It was fully my intention to have been present at the meeting, but indisposition today, I regret to say, compels me to deny myself that privilege.

Most sincerely yours,

ERNEST WENDE,

Health Commissioner.

ABSTRACT.

A New Dietetic and Injection Method of Treating Typhoid Fever

With a Report of One Hundred and Thirty-Eight Consecutive Cases Successfully Treated in the Last Ten Years

F. J. W. MAGUIRE (*Journal of Michigan State Medical Society*, July, 1908), under the above title states his conclusions upon experience gained in the United States Marine Hospital service and in private practice. In part, he says:

I noticed when treating children with summer diarrhea that shortly after giving them nitrogenous food in the form of milk or beef tea their temperature would always rise. I found that by giving these children a carbohydrate diet in the form of barley or rice water, I rarely had a rise in temperature. With this observation in mind and remembering the results found in my autopsies following typhoid, I came to the conclusion that milk as a diet in typhoid fever should be eliminated. To further strengthen this theory, I determined to carefully watch the results following the use of carbohydrate diet in the form of rice or barley water and the like. In eighteen cases I found the temperature rise following the milk diet, while there was no perceptible increase in temperature after taking rice or barley water.

I need scarcely add that as a food in typhoid fever I have never since used milk. It is my practice, when I first see a typhoid fever case, to give plenty of sterile water by mouth for five to ten days or until the patient seems to require nourishment, then I use the peptonoids well diluted with sterile water, and the various flavored ices and gelatines. I condemn cow's milk, as

it is a culture medium and the cause of a great deal of local irritation.

With reference to treatment the author states:

Having eliminated the milk diet with its terrible irritating effects in the already inflamed Peyer's patches, half the battle is won. This brings us to a consideration of the therapeutic aspect of this subject. In taking up the use of carbolic acid as the therapeutic agent in typhoid fever, I at first thought that I had discovered means whereby I could abort the disease. I commenced by giving half-dram doses of carbolic acid in a pint of sterile water as an enema. This I found very severe. The temperature would drop from 104 to subnormal and the patient showed signs of carbolic acid poisoning. The temperature would run from normal to 100 for a few hours; then resume its course. The kidneys were carefully watched in all these cases, as they are the filters by which the toxins are eliminated. In my next series of experiments I began with one drop of carbolic acid in a pint of sterile water given as an enema; if the temperature was not reduced I gave another enema in three hours with two drops, and so on increasing until I gave as high as ten drops or the tolerance of my patient allowed. My next series of experiments was with the drop method of injection. I mixed three to five drops of carbolic acid in a pint of sterile water, placed the solution in a fountain syringe alongside the bed and about a foot above the patient, and allowed about one hour for the solution to pass into the rectum. This was regulated by a gauge with a water glass attachment which shows how fast the water drops. Through the reverse mucous currents this solution is carried throughout the intestinal tract and through this large area of absorption is carried to every tissue in the body.

In conclusion the author says:

I do not limit the use of carbolic acid injection to typhoid treatment in reducing temperature in pneumonia and gastritis and have carried cases of acute appendicitis to a sub-acute or chronic form, thereby lessening the danger from infection at the time of operation. In these 138 cases reported here today, the ages ranged from three to seventy-eight years. I gave no cold baths, but applied ice bags over abdomen, and one bath a day for cleanliness. Occasionally I gave a little strychnine, quinine and salol as indicated. Since adopting this dietetic and carbolic injection method of treating typhoid fever, I have treated 138 consecutive cases. This covers a period of about ten years. All these cases responded readily to treatment, notwithstanding the fact that many were advanced before treatment was begun. Four cases had had most profuse hemorrhages, all of which subsided when the milk diet was removed. I believe by these experiments, I have made some very valuable therapeutic and dietetic discoveries, and have sufficient confidence in my treatment that I am compiling a work on the subject.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

All communications, whether of a literary or business nature, books for review and exchanges, should be addressed to the editor, 238 DELAWARE AVENUE, BUFFALO, N. Y.

VOL. LXIV.

NOVEMBER, 1908.

No. 4

The Army Medical Reserve Corps.

AFTER years of effort on the part of the Surgeon General, the Medical Reserve Corps of the United States Army has been organized in compliance with the law passed at the last session of Congress, and commissions have been issued by President Roosevelt.

This is the final act in a struggle—and it has been a struggle against official indifference and Congressional stupidity—which has been waged by the medical journals of this country, almost without exception, in furtherance of the efforts of the Surgeon General to secure material for the up-building of the finest and best equipped medical corps of any army in the world, and to remove from official life a most humiliating figure, that of contract surgeon. The contract surgeons, in the main, able and capable men, by reason of their official designation were little more than mere conveniences and were looked down upon and ignored by all officialdom with the exception of the Surgeon General's office and the members of his staff. There is little use in reviewing the course of the fight which has been made for the establishment of the Medical Reserve Corps and for an increase in the numerical strength of the medical corps of the army. The course of the struggle has been noted from time to time in the JOURNAL and its final victory was announced a short time ago when Congress passed, and the President signed, the bill making provision for the recognition which had been so long demanded on behalf of the medical profession.

Beginning with an editorial in the JOURNAL calling attention to the anomalous position of the acting assistant surgeon during the Spanish war the agitation grew until it assumed national proportions and it is creditable to the medical profession at large to know that, with very few exceptions, there was unanimity of

opinion regarding the rights of the medical officer who, while so designated, had few of the rights of an officer. As an acting assistant surgeon he performed all the duties of a commissioned officer except acting as a member of courts martial; he wore the uniform of the service; he acted on boards of survey; he signed and receipted for property; he was held responsible for all properties in his care; he took exactly the same oath of office that a commissioned officer swore to; he was in command of detachments of hospital corps men; he could not enlist men, but he could recommend their discharge on surgeon's certificate of disability; he went to the firing line with commissioned officers and enlisted men and he performed the duties of a soldier and a surgeon. Occasionally an acting assistant surgeon was killed or died of disease. The only difference between him and a commissioned officer was that he did not wear a sword and his collar ornaments were of silver instead of gold, and in the eyes of the majority of the line he was "only a contract." He was "only a contract" even when his official title was acting assistant surgeon, with the relative rank of a first lieutenant.

In spite of these known facts there was little difficulty in securing well equipped men for service when necessity arose. Probably this system might have been slower of eradication had not one of those acutely brilliant Washingtonian minds conceived the idea that the acting assistant surgeon was getting too much glory by being designated as an assistant surgeon and the title was changed to contract surgeon, and the collar ornaments ordered to consist of merely the letters "C. S." Then the medical journals and the profession began a systematic effort to further the plans of the Surgeon General. The increase in the personnel of the medical corps of the army was granted, much too small as it was, and with it went the provision for the establishment of the Medical Reserve Corps which is of inestimable importance when viewed from the standpoint of army medical efficiency. The bill creating the corps provides examination for entrance which is nearly the same as that for entrance into the medical corps of the army.

The first move on the part of the Surgeon General was to immediately transfer all the men serving as "contract surgeons" to the medical reserve corps and secure for them commissions. This was a simple matter being merely a question of transfer. With that cleared up came the work of establishing the real Medical Reserve Corps, the organisation of the nucleus of what will eventually be a thoroughly competent, well-equipped medical service which will not have its equal in any army in the world. Invitations were sent to some of the most prominent surgeons in this country to become members of the corps in an advisory capa-

city, and that many have accepted speaks well for the success of the corps. The complete list has not yet been made public, but commissions have been issued to Dr. Roswell Park of Buffalo, professor of surgery in the medical department of the University of Buffalo; Dr. J. C. DaCosta, professor of surgery in the Jefferson Medical College, of Philadelphia, and Dr. Frank P. Foster of New York City, editor of the New York Medical Journal. The next step in the organisation of the corps was the selection of men for commissions who had served as acting assistant surgeons and shown executive ability in army medical matters, or who had served as acting surgeons at posts and thus gained a knowledge of army routine.

Thus far has the work of organisation progressed and now to the corps will be added the younger members of the profession who wish to make army medicine their profession, and those who by reason of some decided qualification are fitted for special work in the event of emergency. With an organisation composed of experienced men and specialists in medicine and surgery, it is hard to conceive of an emergency which the Surgeon General of the Army cannot meet with comparative ease and promptness.

The disgraceful lack of preparedness which was demonstrated by the on-coming of the Spanish war will never be repeated. Here General Sternberg was plunged into a situation demanding a large number of surgeons. He had a woefully small medical corps for the work on hand and was compelled to employ a large number of acting assistant surgeons, men who, professionally well-qualified and competent, were wholly lacking in even a suspicion of technical detail. It is a monument to the steadfastness of the profession and to the versatility and executive ability of the then Surgeon General that the emergency was met as it was and with so little criticism in the face of official incapacity in other departments upon which depended the production of medical supplies at points of necessity.

So unprepared a period cannot again occur. Should war become a fact tomorrow, General O'Reilly will have a much larger medical corps at his command, and in addition could call upon men who had army experience, as well as a large number of commissioned officers well grounded in military medicine.

The details of the final organisation are not yet completed but it is quite likely that the members of the reserve corps will be required to make reports to the Surgeon General's office in much the same manner that a commissioned officer on duty reports. The medical reserve corps officer should be furnished with the printed material concerning executive work of the department, in order that he may be kept in touch with changes in routine; he should be furnished with a copy of the medical

manual and such other literature as is necessary for the proper preparation for his assuming charge of any branch of the medical work of the army. He is a commissioned officer; he is a medical man, and he only needs the finishing touches of the executive and so-called "paper work" to become a thoroughly well-equipped army medical officer.

There are great possibilities in this organisation; great possibilities for great good, if the material at hand is taken advantage of as undoubtedly it is the Surgeon General's intention. If the members of the corps are trained in army detail, they will become a most valuable adjunct to the regular medical corps. If the reserve corps is organised and allowed to vegetate as merely commissioned officers, their value in the event of sudden emergency would be little more than that of the acting assistant surgeon in the time of the Spanish war, when millions of dollars worth of Government property was placed in the care of medical men, who had not the slightest conception how to care or account for it.

The Medical Reserve Corps should be taught to report itself to the proper officer; it should be made thoroughly familiar with army medical matters and literature and correspondence, and so gradually brought into close touch with the Surgeon General's office; so far as possible, each member of the corps with the possible exception of those who act in an advisory capacity, should be given at intervals practical experience in executive work under the guidance of the post surgeon at the nearest army hospital. This may mean more or less of an inconvenience to some of the members of the corps, but the knowledge that he is fitting himself for actual, practical and satisfactory work in the event of emergency should more than counterbalance the minimum of inconvenience. By the adoption of some such measure of detail organisation, the medical reserve corps can be made an organisation flexible, smooth-working and ready for instant service. The fact that the medical reserve corps officer might not be called upon to do executive work is a secondary consideration; the fact that he is prepared to do it and competent to take charge of any branch of army medical work is the point to be achieved.

Commissions have been issued to Dr. Nelson W. Wilson, lecturer on genitourinary diseases in the University of Buffalo, who served as an acting assistant surgeon in the Spanish war, and to Dr. Edgar R. McGuire, lecturer on surgery in the University of Buffalo, who has served on several occasions as acting surgeon at Fort Porter during the absence of the post surgeon.

The medical reserve corps is uniformed the same as an officer of the medical corps, with the exception that the letters "R. C." are intertwined in the U. S. of the collar ornament.

AWARDS to successful competitors in the exhibition, which formed an essential part of the recent International Congress on Tuberculosis, were announced October 11, 1908, as follows:

For the best evidence of effective work in the prevention of tuberculosis since the last congress, in 1905, cash prizes of \$500 each to the Women's National Health Association of Ireland and to the New York Charity Organisation Society; gold medals to the Swedish and Boston associations.

The prize of \$1,000 for the best exhibit of an existing sanatorium for the treatment of curable cases was divided, \$500 being given each to the White Haven (Penn.) Sanatorium and the Brompton Hospital Sanatorium, of Frimley, England; gold medals to the Doelitz Sanatorium, of Berlin, and the Adirondack Cottage Sanatorium, Saranac Lake, N. Y.

For a furnished house for the families of the working class, gold medals to Milton D. Morrill, of Washington, and José F. Toraya, of Cuba.

One thousand dollars to the Henry Phipps Dispensary, Baltimore, for the best exhibit of a dispensary for treatment of the tuberculous poor; gold medals to the Manhattan Tuberculosis Dispensary, of New York, and the Henry Phipps Institute, Philadelphia.

To the Brompton Hospital, of London, the \$1,000 prize for the best exhibit of a hospital for the treatment of advanced pulmonary tuberculosis; gold medals to the Loomis Sanatorium, Liberty, N. Y., and the Massachusetts State Hospital, Tewkesbury, Mass.

The prize of \$100 for the best educational leaflets, to the Pennsylvania Society for the Prevention of Tuberculosis, Philadelphia, and the Verein für Bekämpfung der Schwindsucht, Chemnitz and Umgebung; gold medals to Dr. O. D. Wescott, Denver; Dr. H. S. Goddall, New York, and George H. Kress, Los Angeles.

New York won the gold medal for the best exhibit sent in by the states illustrating effective organisation for the restriction of tuberculosis. A gold medal went to Germany for its national exhibit on this subject. For the best contribution to the pathological exhibit gold medals were presented to the United States bureau of animal industry and to England. Wisconsin won the gold medal for an exhibit of the best laws and ordinances in force in June, 1908, for the prevention of tuberculosis, while New York city won a gold medal for the best repressive municipal laws.

Among the other awards were special gold medals for various kinds of work in the campaign against tuberculosis to the United States Department of the Interior, the Government Printing

Office, Department of Commerce and Labor, Marine Hospital Service, Census Bureau, New York State Charities Aid Association, Sea Breeze Hospital, of Coney Island; Playground Association of America and the International Children's School Farm League, of New York city.

ELSEWHERE we publish the action of the commission created by the Buffalo Academy of Medicine, and of the committee appointed by the Medical Society of the County of Erie in reference to building a hospital for the care of contagious diseases, which should receive the considerate attention of every reader of the JOURNAL in Buffalo and Erie County. It is stated that the state department of health proposes to investigate the question, *inter alia*, of the inadequacy of Buffalo's facilities for the care of contagions. Better take action at once, Mr. Aldermen and Mr. Supervisors!

PERSONAL.

DR. JOHN F. ERDMANN, of New York, at a meeting of the Board of Directors of the New York Post-Graduate Medical School and Hospital, held October 7, 1908, was appointed Professor of Surgery for the ensuing year.

DR. GEORGE M. GOULD, founder and formerly editor of *American Medicine*, has removed from Philadelphia, to Ithaca, N. Y., where his offices are established at Cayuga Heights.

MR. FRANK A. RUF, of Saint Louis, has been created a Knight of the Order of the Lion and the Sun by the Shah of Persia. Mr. Ruf has been a collector of Persian textile art treasures for years, and this coming to the knowledge of the Shah, an order was issued—an Imperial firman—commanding the vice-consul at Saint Louis, to confer the decoration which was done recently with ceremony.

OBITUARY

DR. CHARLES HARRINGTON, of Boston, one of the most distinguished sanitarians in America, died at Lynton, England, September 11, 1908, aged 52 years. His death took place while he was on vacation, was sudden, and presumably caused by heart disease. He was an ornament to his profession and his death

is a distinct loss to scientific, especially sanitary, medicine the world over.

DR. ALBERT ANDREW HERSCHLER, of Buffalo, died at his home in this city, October 1, 1908, aged 24 years. He graduated at the University of Buffalo, Medical Department, in 1906.

DR. TURNER ANDERSON, of Louisville, one of the prominent physicians in Kentucky, died at Saints Mary and Elizabeth Hospital in that city, October 13, 1908, aged 66 years. His disease is alleged to have been an affection of the heart.

DR. OSCAR FITZERLAND MILLER, died at the home of his son at Flint, Mich., August 11, 1908, of heart disease, aged 77 years. He graduated at the University of Buffalo, Medical Department, in 1858, afterward serving as a medical officer during the Civil War.

DR. ELTON S. RICH, of Kennedy, N. Y., was found dead in his office, October 7, 1908, aged 54 years. He graduated from New York University in 1886, and was one of the veteran physicians in Chautauqua County. He practised his profession at Kennedy for some twenty years or more.

SOCIETY MEETINGS.

THE Medical Society of the County of Erie held its regular meeting Monday, October 12, 1908, at 8 p.m., at the Society of Natural Science rooms, Buffalo Library Building under the presidency of Dr. Edward Clark. The program arranged by T. H. McKee, chairman of the committee on program, was carried out as follows: N. G. Russell, Cerebral hemorrhage in the newly born; A. G. Bennett, Some thoughts on sick headache; Helena Kuhlman, A case of anxiety psychosis; George N. Jack, Lymph; Allan A. Jones, Symptoms of pancreatitis; E. J. Meyer, Surgery of the pancreas.

THE Medical Association of Central New York held its forty-first annual meeting at Buffalo, Tuesday, October 27, 1908, (postponed from October 20), under the presidency of Dr. C. C. Frederick, of this city. The papers and the proceedings will be published in subsequent issues of the JOURNAL.

THE Southern Surgical and Gynecological Association will hold its twenty-first annual meeting at Saint Louis, December, 15, 16,

and 17, 1908. Under the presidency of Dr. F. W. Parham of New Orleans. The secretary, Dr. William D. Haggard of Nashville, is preparing an interesting program, and all members who wish to read papers should address him without delay.

THE Mississippi Valley Medical Association, at its annual meeting held at Louisville, October 13, 14, and 15, 1908, elected officers for the ensuing year as follows:

President, J. A. Witherspoon, Nashville; first vice-president, Louis Frank, Louisville; second vice-president, Albert E. Sterne, Indianapolis; treasurer, S. C. Stanton, Chicago; secretary, Henry Enos Tuley, Louisville. The next annual meeting will be held in St. Louis, October, 1909.

THE Buffalo Academy of Medicine held meetings during October as follows:

Section of Pathology.—Tuesday, October 6, at 8.30 P. M. Program. Professor Nathan Raw of Liverpool, England, delivered a paper on the relation of human and bovine tuberculosis and their treatment. Dr. Raw, one of the delegates to the International Congress on tuberculosis which met recently at Philadelphia and Washington, is one of the recognised authorities on this subject in Europe.

Stated Meeting, Tuesday evening, October 13, at 8.15 o'clock. The section of medicine furnished the following program. (1) Report of the commission on contagious diseases and municipal contagious hospital, Julius Ullman, chairman; (2) Contagious disease hospitals; their medical and financial importance to the community, Robert J. Wilson, superintendent of contagious hospitals, department of health, New York city; (3) A brief demonstration of the manner contagious disease records are kept by the Buffalo department of health, Franklin C. Gram.

Section of Surgery.—Tuesday evening, October 20, at 8:30 o'clock. Program: Symposium on gonorrhea. (1) Morphology of the gonococcus with its differentiation by staining from other urethral bacteria, A. A. Thibaudeau; (2) The treatment of acute gonorrheal urethritis in the male, David E. Wheeler; (3) The treatment of chronic gonorrheal urethritis and its complications in the male, Nelson W. Wilson; (4) The treatment of gonorrhea in the female, Earl P. Lothrop; (5) Prophylaxis of gonorrhea, James A. Gardner.

Special Meeting, October 27, 1908, at 8.30 P. M. Council Meeting at 8.15 P. M. Order of business for academy:

(a) Balloting on new members; (b) Consideration of question of incorporation as announced by former notice of this meeting dated September 23; (c) The committee on permanent home submitted several propositions with plans and estimated cost. The section of obstetrics and gynecology provided the following program. Ectopic pregnancy, Herman E. Hayd, M. D.

COLLEGE AND HOSPITAL NOTES

CHANGES in the staff of the Buffalo General Hospital are announced as follows: Dr. John Parmenter, from attending surgeon to consulting surgeon; Dr. Edgar R. McGuire, from assistant attending surgeon to associate surgeon. Dr. Frederick J. Parmenter was appointed assistant surgeon.

CHANGES in the staff at the German Deaconess's Hospital recently have been numerous for some unexplained reason. New members of the medical staff suddenly received notice from the management that their services were at an end. Among those who are dropped occur the names of the following well-known physicians: Dr. Conrad Diehl, Dr. DeLancey Rochester, Dr. James W. Putnam, Dr. William Gaertner, Dr. W. S. Renner and Dr. Edmond E. Blaauw.

The new appointees are as follows: Dr. David A. Morrison, Dr. Henry E. Stadlinger, Dr. Nelson W. Bodenbender, Dr. George L. Fischer, Dr. M. J. Downey, Dr. Alice A. Bennett, Dr. George W. Seitz, Dr. Max Breuer and Dr. Leonard Reu.

JAPANESE progressiveness is again emphasised by the fact that in October 25, 1908, a magnificent hospital built by the Japanese Government, was formally opened at Seoul, Corea. It is one of the finest institutions in the Far East and includes a school of medicine.

THE new Homeopathic Hospital, to be erected at the corner of Linwood and Lafayette avenues, Buffalo, has become an assured fact. Mrs. George A. Plimpton, president of the advisory board, dug and turned the first spadeful of earth on Tuesday morning, October 20, 1908, whereupon the contractor immediately began active work, with the expectation that the building will be ready for occupancy in the spring of 1910. The ceremony was witnessed by a number of citizens, besides the officials who were present.

When Mrs. Plimpton had turned the sod with the aid of a pick, her daintily decorated spade being too light for the task, she expressed the hope that those who have been skeptical about the success of the hospital will now believe it is a reality, and put their shoulders to the wheel to help the good work along.

BOOKS AND AUTHORS.

Pulmonary Tuberculosis and its Complications. By **Sherman G. Bonney, M.D.**, Professor of Medicine, Denver and Gross College of Medicine, Denver. Octavo of 778 pages, with 189 original illustrations, including 20 in colors and 60 x-ray photographs. Philadelphia and London: W. B. Saunders Company, 1908. (Cloth, \$7.00; half morocco, \$8.50 net prices.)

At no time in the history of medicine has such interest in pulmonary tuberculosis, both in professional and lay circles been manifest as at present. The public in general is beginning to understand that it is a preventable disease and the inquiry is making on all sides "how shall preventable measures best be adopted to reach the largest number of persons especially those with slender purses?" The recent congress at Washington will have missed its purpose if it has not answered this question, at least in large measure.

The work, the treatise perhaps we should say, now submitted for the consideration of the profession, is essentially a clinical exposition of the subject, intended more particularly for the general practitioner and from this viewpoint possesses special value. The residence of the author within the zone of climatic prevention or cure, qualifies him to speak with intelligence on this part of the subject,—a part, too, of no mean import. Since the isolation of the tubercle bacillus, views relating to the cause of pulmonary consumption, have completely changed front, the doctrine of heredity even by many having been turned away as unworthy of credence.

These questions are thoroughly discussed by Bonney, he holding to the conservative viewpoint—namely, that congenital tuberculosis must be an admitted possibility, though of exceedingly rare occurrence. All avenues of infection are considered, means of early diagnosis set forth, and methods of cure are described with great exactitude, all however, with simplicity. It is a book that keeps abreast of scientific facts and is an ornament to the literature of medicine, to which it contributes a fund of information. Every physician who wishes to keep himself thoroughly informed regarding all phases of tuberculosis of the pulmonary variety, should give careful study to the book; it is full of interest and the author in the last chapter gives his observations concerning the practical application of vaccine therapy to this disease.

State Board Questions and Answers. By **R. Max Goepp**, M.D., professor of clinical medicine at the Philadelphia Polyclinic. Octavo, pp. 684. Philadelphia and London: W. B. Saunders Co. (Cloth, \$4.00.)

This book displays a surprising energy on the part of the compiler and is well worthy the attention of medical examiners—of anybody whose duties require them to examine for degrees or state license, or for the army or navy.

The topics covered are: physics, chemistry, physiology, anatomy, hygiene, materia medica and therapeutics, practice of medicine, surgery, obstetrics, gynecology, pathology, and bacteriology; and these are subdivided, as, for instance: practice of medicine into the main heading and general diagnosis, physical diagnosis, diseases of the respiratory organs; diseases of the heart and bloodvessels; the infectious diseases; the acute eruptive fevers; diseases of the digestive organs; diseases of the kidneys and bladder; the anemias; constitutional and nervous diseases. In short nothing of importance has been omitted. A valuable feature of the book is the full and complete index which makes it a work of easy reference.

The Practical Medicine Series. Ten volumes. Issued under the general editorial charge of **Gustavus P. Head**, M.D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Vols. 1, and 2, General Medicine, and Surgery. Series 1908. Chicago: The Year Book Publishers. (Price, \$1.50, \$2.00; entire series, \$10.00.)

1. General Medicine. This volume is edited by Frank Billings and J. H. Salisbury. It deals with diseases of the respiratory organs, circulatory organs, blood and bloodmaking organs, general infectious diseases, ductless glands, metabolic diseases, and diseases of the kidneys. Price, \$1.50.

2. General Surgery. This number is edited by John B. Murphy, and is a compilation of the world's surgery during the past year (1907). The editor advocates a uniform technic in the administration of anesthetics. The entire work shows great skill in abstracting and is of great value for ready reference. Price, \$2.00.

BOOKS RECEIVED.

A Manual of Diseases of the Nose and Throat. By **Cornelius G. Coakley**, M.D., Clinical Professor of Laryngology in the University and Bellevue Hospital Medical College, New York. New (4th) edition, 12mo, 604 pages, with 126 engravings and 7 colored plates. Cloth, \$2.75 net. Lea & Febiger, Publishers, Philadelphia and New York, 1908.

Pathogenic Microorganisms, including Bacteria and Protozoa. A practical manual for students, physicians and health officers. By **William H. Park**, M.D., Professor of Bacteriology and Hygiene in the University and Bellevue Hospital Medical College, New York. New (third) edition, thoroughly revised and much enlarged. Octavo,

648 pages, with 176 illustrations and 5 full-page plates. (Cloth, \$3.75, net. Lea & Febiger, Philadelphia and New York, 1908.

High-Frequency Currents by Frederick Finch Strong, M.D. Instructor in Electro-therapeutics at Tuft's College Medical School, Boston. With 183 illustrations in the text. Rebman Company, 1123 Broadway, New York.

Textbook of Nervous Diseases and Psychiatry for the use of students and practitioners of medicine, by Charles L. Dana, A.M., M.D., LL.D., professor of nervous diseases in Cornell University; neurologist to the Montefiore Hospital; neurologist to the Woman's Hospital, etc. Seventh edition. Two hundred and sixty-one engravings; three plates in black and colors, pp. 782. New York: William Wood & Company. 1908. (Price, cloth \$5.00 net.)

Operative Midwifery, by J. M. Munro Kerr, M.B., C. M. Glas. Fellow of the faculty of physicians and surgeons, Glasgow; obstetric physician to Glasgow Maternity Hospital; gynecologist to the Western Infirmary, etc., with 294 illustrations in the text. New York: William Wood & Company. 1908. (Price, \$6.50 net. Cloth.)

Textbook of Operative Surgery, covering the surgical anatomy and operative technic involved in the operations of general surgery designed for practitioners and students, by Warren Stone Bickham, M.D., Phar.M., junior surgeon to Touro Hospital, New Orleans etc. Third edition, greatly enlarged. 854 illustrations, pp. 1206. W. B. Saunders Company, Philadelphia and London. 1908. (Price, cloth \$6.50 net.)

Manual of Clinical Diagnosis by James Campbell Todd, Ph.B., M.D., associate professor of pathology Denver and Gross College of Medicine, University of Denver, etc. Illustrated. W. B. Saunders Company, Philadelphia and London. 1908. (Price, \$2.00 net.)

The Campaign against Tuberculosis in the United States, including directory of institutions dealing with tuberculosis in the United States and Canada. Compiled under the direction of the National Association for the Study and Prevention of Tuberculosis by Philip P. Jacobs, New York: Charities Publication Committee 1908. (Price, \$1.00 net.)

On the Means of the Prolongation of Life, by Sir Hermann Weber, M.D., F.R., C.P. Consulting physician to the German Hospital, the National Hospital for consumption, Ventnor, the Mount Vernon Hospital for consumption and a member of the consulting committee of King Edward VII sanatorium at Midhurst, London. John Bale, Sons, and Danielsson, Ltd., Oxford House 83-91 Great Titchfield street, Oxford street, West. 1908. (Price, \$1.25 net.)

Spectacles and eyeglasses, their forms, mounting, and proper adjustment, by R. J. Phillips, M.D., ophthalmologist to Presbyterian Orphanage, etc. Fourth edition, revised, with 56 illustrations. Philadelphia: P. Blakiston's Son & Company, 1012 Walnut street. 1908. (Price, \$1.00 net.)

Transactions of the Thirtieth Annual Meeting of the American Laryngological Association held at Montreal, Canada, May 11, 12, 13, 1908. New York: Published by the association. The McConnell Printing Company, printers. 1908.

Intestinal Autointoxication, by A. Combe, M.D., professor of clinical peditary at the University of Lausanne (Switzerland), together with an appendix on the lactic ferments with particular refer-

ence to their application to intestinal therapeutics, by Albert Fournier, formerly demonstrator at la Sorbonne, Paris. Only authorised English adaptation by William Gaynor States, M.D., clinical assistant in rectal and intestinal diseases at the New York Polyclinic. Eighteen figures, four colored. Rebman Company, New York. 1908. (Price, cloth \$4.00.)

Refraction of the Eye, by Harry C. Parker, M.D., Clinical Professor of Ophthalmology, Indiana University School of Medicine, Indianapolis. With 106 illustrations. Philadelphia and London: W. B. Saunders Company. 1908. (Price, \$1.25 net.)

Reference Handbook for Nurses by Amanda K. Beck, Graduate of the Illinois Training School for Nurses. Second edition. Revised. Philadelphia and London. W. B. Saunders Company. 1908. (Price, \$1.25 net.)

Obstetric and Gynecologic Nursing by Edward P. Davis, A.M., M.D., Professor of Obstetrics in the Jefferson Medical College, Philadelphia; Obstetrician and Gynecologist to the Philadelphia Hospital; Consultant to the Preston Retreat. Third edition, thoroughly revised. Philadelphia and London: W. B. Saunders Company. 1908. (Price, \$1.75 net.)

Obstetrics for Nurses. By Joseph B. DeLee, M.D., Professor of Obstetrics in the Northwestern University Medical School, Chicago. Third Revised Edition. 12mo, of 512 pages, fully illustrated. Philadelphia and London: W. B. Saunders Company. 1908. (Cloth, \$2.50 net.)

Textbook of General Bacteriology. By Edwin O. Jordan, Ph.D. Professor of Bacteriology in the University of Chicago and in Rush Medical College. Fully illustrated. Philadelphia and London: W. B. Saunders Company. 1908. (Price, \$3.00 net.)

Textbook of Diseases of Women. By Charles B. Penrose, M.D., Ph.D., formerly Professor of Gynecology in the University of Pennsylvania; Surgeon to the Gyneccean Hospital, Philadelphia. With 225 illustrations. Sixth edition revised. Philadelphia and London: W. B. Saunders Company. 1908. (Price, cloth \$3.75; half-morocco, \$5.25 net.)

"Doctor," said the shrewd-looking man, "how many feet of gas does it take to kill a man?"

"That's rather a queer question," replied the doctor. "Why do you wish to know?"

"Well, you see, one of the guests at my hotel used enough of it to kill himself, and I want to send in a proper bill to his executors."—*Philadelphia Press*.

"Here is a doctor who says you mustn't eat when you're worried."

"But suppose you're always worried for fear you ain't going to get anything to eat?"—*Cleveland Plain Dealer*.

Lobster and champagne for supper—that's high jinks. Sawdust and near-coffee for breakfast—that's hygiene. Between these two eminences, however, there's room for some genuine living.—*Life*.

ORIGINAL COMMUNICATIONS.

Some Experiences with Extrauterine Pregnancy and Report of Cases¹

By HERMAN E. HAYD, M. D., Buffalo, N. Y.

THE importance of this subject, together with its very frequent occurrence and the now universally accepted surgical treatment of the condition, has prompted me to write this paper, in which I shall try to deal, briefly and practically, with a few phases of the question and giving in its course, the conclusions which have been forced upon me as a result of an experience with seventy-three cases, in all stages of development, and perhaps with all possible complications and difficulties. After studying my records, they may be conveniently grouped into certain distinct and separate classes.

First.—Those in which rupture had not taken place.

Second.—Those in which sudden rupture occurred and a large vessel was opened, or a tubal abortion in which the bleeding continued freely into the peritoneal cavity, and where there was no tendency to localisation of the hemorrhage or the formation of an hematocele,—the so-called tragic or cataclysmic cases.

Third.—Cases in which rupture, partial or complete, had taken place,—including tubal abortion, partial and complete,—and where upon operation a large pelvic hematocele, more or less completely encysted, existed and where the ovum was so small that it either escaped observation or it was broken down in the blood clots which were in the sac contents. In this group can also be included those cases where the rupture took place on the under surface of the tube and the blood escaped into the folds of the broad ligament, producing a broad ligament hematocele, which, in my experience, is a rare variety and cannot often be diagnosticated until the abdomen is opened.

Fourth.—A group where rupture took place, but where the ovum continued to grow, say up to the fourth or fifth month, either within the peritoneal cavity or between the folds of the broad ligament, because it was not completely detached at the time of rupture, or because it made a new placental attachment.

1. Read at the Buffalo Academy of Medicine, October 27, 1908.

Fifth.—A class where the conception product broke down more or less completely and formed a pelvic abscess, or where its contents, pus, bones and debris, were being discharged either through the vagina, rectum, bladder or abdominal wall.

Sixth.—Where the fetus went on developing until it was viable or to term, and was then delivered by operation, or it died during labor and was finally removed as a lithopedion or other degenerated product.

Any form of pregnancy outside of the uterus is termed extra-uterine, and so far as we are interested, clinically anatomical distinctions are of little value; because it matters not whether the condition be one of tubal abortion or rupture in any part of the tube or cornu, the symptoms are practically the same and their relief must usually be brought about by surgical intervention.

The diagnosis of ectopic pregnancy before rupture takes place is seldom made because the cases do not come under observation early enough, and usually when a specimen is obtained early in the period of fecundation, it is because an operation was undertaken for some other condition, or where a tentative diagnosis was made with merely a suspicion of tubal pregnancy, because a slightly distended tube, whether by serum, blood or pus or an aberrant ovum, may give the same objective and subjective symptomatology. However, any tense, elastic and painful swelling of the tube, particularly when the swelling is confined to one side, and with a uterus reasonably movable, should always make the surgeon suspicious, especially if the period has been delayed, or if there has been present some irregular bleeding from the uterus. Pus in a tube, especially if slow in development, is usually associated with considerable exudate, and therefore more adhesions exist than are generally present with an early extrauterine pregnancy. Hydrosalpinx, in my experience, is comparatively rare, and hematoceles of the tube are most often the result of a slightly or completely detached extrauterine ovum, hence we are justified in making this general statement that any tense, elastic and painful swelling of the tube may be, and often is, an early extrauterine fetation, and should be most carefully watched, as an operation may become necessary at any moment.

In the examination of these women much care must be exercised, as the sac often ruptures as a result of the manipulations. This accident occurred to me once in one of my patients, whom I was examining in my office. She came, complaining of severe pain in the left side which made walking painful. During the examination I felt a painful, tense tumor in the left ovarian

region, and while performing bimanual palpation, she was suddenly seized with an acute cramp-like pain; was nauseated and became faint. I removed her at once to the German Hospital, and opened her abdomen, which contained a large amount of free red fluid blood. The left tube had a rough, irregular tear in it near the fimbriated end, from which blood was flowing very freely. The ovum had escaped into the peritoneal cavity. The patient made a very rapid and excellent recovery.

A second patient,—which may be placed in either the first or second groups,—I saw in consultation with Dr. Gibson, to whom I referred the case, and as the history is exceedingly interesting though a very common one, I shall give it briefly:

MRS. W., aged twenty-five, married two and one-half years. A fine, healthy English woman, who had always been well and regular, but at the last period she flowed rather profusely. She sent for a neighboring young doctor who thought she had a miscarriage, and proceeded at once to curet her, which he did without an anesthetic. Two days after this so-called curetment I saw her, and upon vaginal examination, discovered a small globular swelling in the left side, tense and painful. The uterus was tender, and pain was elicited upon gentle manipulation. I enjoined rest; applied poultices, and gave a little codeia to relieve the pain. She had a temperature of 100°. Upon the following day I saw her again, and turned the case over to Dr. Gibson, directing him to pay particular attention to a possible extra-uterine fetation. As there was still some temperature, I felt that a few days should be taken to eliminate the swollen tube as a result of an infection with the traumatism consequent upon the curetage. Dr. Gibson reported that the patient was doing well, and that the husband had requested him to discontinue his visits, as he thought them unnecessary.

Four weeks after my first visit I was again called to the patient's house, as she was suffering great pain and had been in much distress for some days previous. Upon examination it was at once plainly evident that she was suffering from a large encysted hematocele, the result of a ruptured tubal pregnancy. I removed her to the German Hospital, and under chloroform, opened the culdesac and let out over a pint of black blood and blood clots of various sizes. The cavity was thoroughly irrigated with salt solution, and a piece of gauze was lightly packed into the vaginal cut for drainage. She did well for one week, the temperature remaining normal and then she began to complain of a good deal of pain, there being a constant elevation of temperature of a couple of degrees. On January 12, I opened her abdomen, and removed a large stinking mass, which was a ruptured tube with more or less organised broken-down blood clot. A guaze drain was placed low in the pelvis. She reacted nicely and did well, and on the thirteenth day, with normal

temperature and normal pulse and bowels moving freely and good appetite, I left her in the care of one of my hospital associates, and took a trip East.

On the seventeenth day, trouble was noticed with her bowels, it being impossible to move them with gentle purgatives and injections, and she was always suffering from cramplike pains, but gas was still passing. I returned home February 3, and found her in a bad condition, crying with pain and much distended by gas, although a little gas occasionally passed naturally, but always with great pain. The bowels had not moved in six days, but there was no vomiting. I placed her at once upon the operating table, as it was evident a partial obstruction was rapidly becoming a complete one, and under chloroform anesthesia I reopened the abdominal wound and released a number of adhesions, separating and uncoiling a bad angle which existed in the pelvic sigmoid, and quickly closed the abdominal incision. She bore the operation well, and the bowels moved on the second day; she continued to do nicely, and made a most satisfactory recovery, and she is now a fine, strong, young woman.

If we review this case, we shall see that outside of the obstruction of the bowels, the history is quite common, and my notes record many cases which were mistaken for a miscarriage and were curetted by the attendant before the diagnosis of extrauterine pregnancy had been made. No doubt the slight temperature which existed and especially the pain upon examination, which I observed at my first visit, was increased by the curettage, but I felt positive that the swelling of the tube was a tubal fetation. However, she got better for a short time, and then no doubt a slight rupture of the tube took place, or the trophoblasts had bored and eaten their way through the tube wall and made small openings which permitted slight hemorrhages; these increased in amount and frequency until a large encysted hematocele resulted.

The second element of interest and of most importance to us, and what I trust this paper will provoke a good discussion upon, is what kind of surgery shall be employed and where shall the attack be made. There is not any question in my mind that free vaginal incision will cure many of these early cases, but I believe it is only good practice when the hematocele is recent and the blood not too strongly organised in the sac, and where there is no fetal product to be disposed of. If the condition has existed some time and the blood has become organised into more or less indissoluble bands, as this case of mine was, it is better practice to do a combined operation at the one sitting. First, incise the culdesac and empty out the sac contents, irrigate thoroughly and then open the abdomen and remove the whole mass. By first emptying the sac through the vagina, its walls collapse

more or less; the bowel adhesions are more easily separated and the dangers of breaking the cyst wall and soiling the peritoneal cavity are reduced to a minimum. Vaginal drainage alone, when the case is not recent, implies a long convalescence, often a long run of fever, and for weeks a very dangerously sick woman, and often in the end a second operation to remove the unabsorbed mass with necessarily a high mortality.

In the second group, or tragic class, as Vineberg in a recent paper in the *Medical Record* discusses, are among the most terrible pictures the surgeon is called upon to care for. The symptoms are so sudden and terrific that a mistake in diagnosis should very rarely be made by any medical man with any experience. Some men have recently advocated a waiting policy, but I am not persuaded that it is good practice. On the contrary, in my view, an operation should be performed at once, and salt solution should be slowly and continuously injected into each breast throughout the whole operation, and to this solution adrenaline can often advantageously be added. One can never tell how much blood has been poured into the abdominal cavity, as pulse, hemaglobin count, or any other recent scientific deduction gives us practically no assistance. I have operated upon patients cold and pulseless, and have been surprised to see the pulse immediately come up just as soon as the abdominal cavity was opened and the intraabdominal pressure was relieved by the terrific gush of blood which came through the incision. The broken tube must be quickly found, and a clamp forceps applied and tied off with the greatest dispatch, and the abdomen closed with a few through and through silkworm sutures. The operating room should be very warm, and if possible the patient should lie on an electrically heated table, or any device that will keep up the body temperature should be continuously employed. Strychnia, digitalis and any recognised means of stimulation are to be used, and the patient is placed in bed, with the legs elevated. I have never had a patient in this condition die upon the table, and I cannot believe any have ever died by reason of the extra shock imposed by a rapid operation, who would not have died had no operation been performed, and the sense of well-being and comfort which comes to a surgeon who operates such a case and gets the woman off of the table is, indeed, very great. To stand by and anxiously look for a favorable turn, with all of its uncertainties before an operation is undertaken, is one of the most harrowing experiences I have ever subjected myself to; and, therefore, it has been my practice to operate at once every such case, no matter what condition I found the woman in, and my percentage of recoveries has been encouraging.

As a rule the technical difficulties of such operations are not great, as adhesions are not usually present, and no amount of diagnostic skill and acumen can foretell whether an operation will be difficult, and no tests or signs which are revealed by pulse and respiration,—our usual danger signals—are of much value here, because they do not signify how much free blood exists in the peritoneal cavity, or how much there still remains in the body bloodvessels; or how quickly the empty abdominal bloodvessels will drink up the fluid just as soon as the intraabdominal pressure and irritation are removed. In other words, the condition of extreme shock which these women are found in is not alone due to the mere loss of blood into their own belly cavities, but to the great shock to the sympathetic centers, the result of its quick and sudden accumulation in the peritoneal cavity, and every one of us has noticed when operating on these cases, how quickly the pulse comes up and the respirations improve when the black peritoneum is opened and the first sudden escape of fluid takes place. If the above premises and deductions be true, then it seems to me that we must come to an incontrovertible conclusion, that the waiting or delay policy of treating this class of cases is not good surgery. However, this, like many other surgical problems, must be solved by each surgeon according to his own light and experience and the conditions confronting him.

The diagnosis of the third and fourth groups, where hematocoele exists and a detached fetus of recognisable size, can usually be easily established if sufficient time is taken to carefully work up the history of the case. The existence of a large swelling, the delayed or absent period, the irregular discharges of blood, pathognomonic in character, tarry, smeary and sticky, as Boldt pointed out in a recent paper, with shreds of decidual membrane, and sometimes even a perfect mold of the uterus, together with shooting pains in the rectum, and with that peculiar bearing down and forcing tenesmus seen in these cases, associated with many of the signs and symptoms of later pregnancy. Unfortunately, these cases are hurried to the operating table simply because a lump or tumor was felt upon vaginal examination, and a careful study of the symptoms was not systematically made. If the distended Douglas's pouch be opened, old blood or blood clots, or even pus, will freely flow away, or a digit—or other small bone—can often be pulled out of the mass, and if through this opening the examining finger be thrust, often much other valuable information can be obtained. Sometimes in these more advanced pregnancies, as has happened in a recent case with me, no fluid escaped through the culdesac incision; it was all absorbed and only the fetal and

placental product remained. I successfully removed from this woman a four-month fetus which was dead and had partly undergone intrauterine, or better, intraperitoneal maceration, and yet the sac contained very little fluid contents.

The treatment of this group of cases I have already detailed, and I am sure my past five years' experience with the combined vaginal opening and copious irrigation, and then an immediate abdominal section, has lessened my previous mortality materially.

The fifth group simply presented the symptoms of pus in the pelvis, or pelvic abscess, and the history of a possible association with an extrauterine product was often not thought of. The long and painful illness, with the presence of a large and tender tumor, and the usual constitutional and local evidences of pus, made an operation imperative. In these cases it is also my practice to first evacuate the pus, if it can be reached through the Douglas's pouch, irrigate and then proceed at once to remove the remaining pathology by abdominal section, and drain below through the vagina with gauze or tube, together with properly placed gauze drains above, according to the indications of the case. If there exists above a dirty infected area of considerable size, I usually place a gauze wick or nest in each iliac fossa, removing them on the third to the sixth day.

I have never met an extrauterine fetation that has gone on living to term, nor have I operated upon such a case where a living baby existed; but I read at the meeting of the American Association of Obstetricians and Gynecologists, in Detroit, a paper which dealt with a most interesting case of a lithopedion which I successfully removed from a woman sixty-seven years of age, and which had existed for thirty-two years. And that paper, with photographs, was printed in the December number, 1907, *American Journal of Obstetrics*, and I shall pass around the original photographs of the specimen, which is now preserved in the Pathological Museum of the Medical Department of the University of Buffalo.

493 DELAWARE AVENUE.

Anesthesia.¹

By CARLTON C. FREDERICK, M. D., Buffalo, N. Y.

I WELL remember the trepidation when I first entered my hospital interne service with which I gave an anesthetic the first few times, for I knew nothing about doing it aright. It has always been the custom in most hospitals to place the latest ar-

1. President's address delivered at the forty-first annual meeting of the Medical Association of Central New York, held at Buffalo, October 27, 1908.

rival, the newest interne, in charge of the administration of the anesthetic during surgical operations and, in many instances, the same rule still obtains. There is no position of trust in the operating room, wherever it may be, that is so important to the patient except the operator himself. Yet, the anesthetic is given by any person who can hold a cone and can pour on the anesthetic, irrespective of his knowledge or experience in this very important part of the surgical proceedings. The dread that most patients have of the anesthetic, who are approaching an operation, is born either of former personal experience or from that of some friend. The old-fashioned paper cone, saturated with ether, thrust over the patient's mouth and nose, the suffocation and struggling during the first few moments of consciousness are certainly enough to make any one who has experienced it, or heard of it, dread the ordeal. Frankly, patients dread the anesthetic more than they do the operation in a large percentage of instances. Undoubtedly deaths following operation have more often been due to the anesthetic than the profession is aware of.

At this point I can do no better than quote from Dr. Baldy's address, at the last meeting of the American Gynecological Society, in which he gives a pen picture which any one of large surgical experience knows so well to be true. Who of you is not familiar with the terrible struggle for breath so common to the etherising room of the past, the congested blackened face, the prolonged anesthesia, the patient only partly relaxed, the delay in the operation, the difficulties of the manipulation after an operation begun, the heartsickness at a difficult and delicate operation made double and trebly so from the unnecessary chances of sepsis, hemorrhage and shock, the feeling of a patient lost from no lack of skill of your own, the slipping of a ligature and a secondary operation or death, the immediate death on the table from failure of the heart, drowning due to inspired sputum, the vomiting on the operating table to the detriment of the operation, the prolonged after period of nausea and vomiting to the great suffering and misery of the patient, the inspiration pneumonias and other pulmonary complications, the nephritis and urinary suppressions, all due in great part to faulty anesthesia? How many deaths at the time of the operation, shortly after operation, or some days or weeks later are due to the same cause? What relation does the anesthetic bear to the large group of pulmonary complications reported from so many different sources, and what is its relation to the thrombosis and embolisms which have in the past caused so much suffering and disaster? What of the fatty degeneration of the liver, heart and kidneys? Who can tell?

It is neither the young or the old doctor who is asked to give the anesthetic who is to blame. They are qualified by reason of their degree, whether they are by experience or not. Why should a patient pay for the services of an experienced operator to rid him or her of the ills amenable to operation and, at the same time have the second most important part of the whole procedure relegated to a wholly inexperienced person. If they can afford to pay for the first, why should they not pay for the second, thereby securing as competent services from the anesthetist in his line as they do from the surgeon in his line?

Who then, is to blame for this condition of affairs? It is the medical profession in general, and the surgeons in particular. In other words, surgery has advanced and its handmaid, anesthesia has not. We have stuck to the old traditions, the old way of giving anesthetics, while surgery has made leaps and bounds in its attainments and possibilities. If the medical profession does not soon awake to the necessities involved and give more competent service in this line, an awakened public sentiment is going to lead to legislation which will force us to do so. Very few hospitals, especially the smaller ones and also some of the larger ones, have a paid anesthetist. They will have upon their wage list, superintendents, superintendent of nurses, housekeepers, laundresses, cooks, drivers, engineers, pharmacists, nurses, and the like, but no paid anesthetists.

The casual anesthetist is often forgetful of his patient and the anesthetic, in his zeal to watch the operation. The paid anesthetist usually has no leaning to surgical work, and it has little or no charm for him. The modern method of anesthetic administration, when done by one competent and experienced, is so little like that of old in its technic or results that one would hardly realise that there could be so great a difference.

I cannot here go into detail as to methods; that is not my purpose. I can only say that much of the dread of the first stages is needless today, as well as the subsequent nausea and distress. I have employed a paid anesthetist at the Buffalo Woman's Hospital for years and can truly say that at least 75 per cent. of my patients never vomit after operations, some of the remaining 25 per cent. have some nausea for the first few hours and about 10 per cent. vomit once, or possibly a few times. The patient is quickly brought under anesthesia and held quietly with no straining, no stertorous breathing, no vomiting to impede the operation, with perfect relaxation, yet with no mucous rales in the throat, or livid skin from congested capillaries. The old method of anesthesia has no place in the medicine of today

and it devolves upon us to place it where it belongs among the relics of the past.

How? You who have connections with hospitals can insist on having some one person installed who knows or who will learn how, as official anesthetist and see to it that he or she is liberally paid for the service, for no competent person can afford to give their time in such service for a pittance. It has become quite the custom in some institutions to have a woman as an official anesthetist. Women make as good anesthetists as one can ask for. Their mental traits doubly fit them for this work, and in hospitals, there is always among the nursing staff one who can be trained to do the work satisfactorily. Some of the largest clinics in this country employ women in this capacity who have no other medical training. It requires knowledge of the essentials of the art first, then that to be supplemented by experience. The ablest medical man in the community may be the poorest anesthetist simply because of want of attention to its details and absence of practice.

What shall I say as to those parts of the country where there are no hospitals, where members of the community too seriously ill to be moved to a hospital must be operated upon in their homes. Most of us who operate have had plenty of these experiences when surgical work must be done under the most unfavorable and trying surroundings. I, myself, have seen times when operating, perhaps, at midnight in a farm house kitchen with smoky oil lamps for my only light and an untrained nurse as my only assistant, that I would have given all my expected fee for an anesthetist who would keep the patient from straining at one time and, at another time, having him so near complete narcosis that I wondered if he would ever breath again. And yet I ask the attending physician who calls me if I shall bring my assistant and my anesthetist? he replies, "No, we have plenty of help; all you need."

Cannot the physicians in every town induce some one of their number to look up the subject, get some practical instruction and then have him give the anesthetic in all cases needing it in their region so that he may supplement his training with absolute practical experience? Isn't this practicable? It seems to me that it is if the medical men in any community will get together, banish jealousies and get down to the practical question of what is best for their common interests in this matter. These suggestions may not be the best solution of the problems involved, but, if they will only serve to ameliorate the present conditions my object in making them will have been attained.

Artificial Dilatation of the Cervix in Obstetrics.¹

By JAMES E. KING, M.D.

Adjunct Professor of Obstetrics, University of Buffalo, Attending Gynecologist to Buffalo General and Erie County Hospitals; Fellow of the Royal Society of London, etc.

DURING the year every general practitioner meets cases, requiring instrumental delivery. In the intrauterine application of forceps, his first concern is the state of the cervix. Is it dilated and if not is it easily dilatable? With an incompletely dilated cervix, but one which is soft and yielding, he may adopt one of two means for its dilatation. Either he may stretch the cervix manually until the dilatation is complete, or he may apply the forceps as soon as the os will admit the blades and dilate by the advancing head. This latter practice, while condemned by some authorities, is a perfectly safe and rational one in the presence of a soft and yielding cervix. It is not however to this class of cases that I ask your attention, but rather to those cases requiring forceps when the undilated cervix is firm and unyielding.

Eclampsia and dry labors supply by far the most frequent indications for forceps under these circumstances, and in these cases dilatation of the cervix often becomes the most difficult and serious part of the delivery. It is my purpose to review the various means for dilating the cervix under such conditions, and consider the method offering the best chance of success and at the same time the one attended by the least injury.

In all such operations the evident risks are shock, infection and tears. With tears come the immediate danger of hemorrhage or the remote effects attendant upon deep cervical laceration. If we reflect for a moment upon the very slow and gradual process resulting in the obliteration of the cervix in normal labor, and then compare the means and method by which artificial dilatation accomplishes the same thing, we should hardly be surprised that even under the greatest care, lacerations occur. In normal labor the advancing membranes and head thin the tissues by gradual rearrangement of the fibers, while in artificial dilatation there is practically no softening as the os dilates, and its widening must depend upon the stretching force alone. We accomplish in one-half or one hour what nature requires ten hours to do, and it is reasonable to expect that the rigid cervix will suffer some trauma.

The means most nearly imitating nature is the use of the variously shaped hydrostatic and pneumatic bags, a class typified

1. Read before the Medical and Surgical Society of Hornell. N. Y., November 2, 1908.

by the Barnes bag. It is only, however, in cases in which time is no object that they are indicated at all. Dry labor affords the only indication in the class of cases that we are considering. Personally I have never used them under these circumstances, much preferring other means. Their use increases markedly the danger of infection, they require much attention from the physician and are more or less uncertain in their action.

The method most commonly adopted, by reason of its convenience and efficiency, is manual dilatation. One or two hands are used depending upon the strength and experience of the operator. By this plan we have the least chance of injury. The soft fingers in contact with the cervix, in themselves cause no injury and they also by their tactile sense determine the degree of tension to which the cervix may be subjected. With a soft yielding cervix there is scarcely any argument in favor of other methods of artificial dilatation. This does not mean that the method carries no dangers with it, for the most extensive cervical tear I ever saw, was the result of too great haste and ill advised force in manual dilatation. In this as in all other obstetric operations it is good judgment, experience, and a cool head that renders accident and injury least likely to occur.

In cases, however, of rigid firm cervix, manual dilatation, for the man of ordinary strength, is almost a physical impossibility and even though he succeeds, at the end of three quarters of an hour's effort, he is practically incapacitated for the effective use of forceps. The experience of all will bear testimony to this statement. In such cases we have two means at our command. One is the employment of multiple cervical incisions and delivery by forceps. This plan I have never employed as one must always have sufficient dilatation for the forceps blades, and if such dilatation has not already occurred it must be accomplished manually. It is easy to imagine that one of these incisions might readily be converted into a deep and serious laceration.

The second method is in the use of the branching dilator. The most familiar one is the Bossi instrument which seems to answer the requirements better than other models of its kind. For the past ten years many reports on its use by American and European obstetricians have appeared and the testimony has been more or less conflicting. We should remember in the use of such an instrument that the personal coefficient is an important factor and while in the hands of one man it proves itself a safe and satisfactory means, with another it may yield entirely different results.

The Bossi dilator is too well known to require description, but a more specific reference to its indications and use may not

be out of place. In a general way it may be said that its indications are those in which rapid delivery is necessary in the interest of mother or child, in cases where a firm unyielding cervix renders manual dilatation difficult or impossible. Eclampsia will, therefore, most often bespeak its use. Cases of dry labor in which the woman has become exhausted and the child in danger furnish other instances. In the induction of premature labor and delivery, it finds a rare indication. I have used it myself once under such circumstances. The instrument is as applicable in cases where no dilatation has occurred, as in those where labor has proceeded to some degree.

The details in the technic in its use are important. The first essential in the preparation for artificial dilatation by any method, is proper position. Such an operation should never be attempted until the patient is in the lithotomy position upon a firm table with the hips well to the edge. The antisepsis in every detail should be most rigorous. In addition to the dilator there should be at hand suture material, needles and holder. A weighted speculum, two strong volsellum forceps and an intra-uterine douche tip complete the essentials. If possible there should be one assistant physician. The use of gloves in these cases, I think, is a disadvantage as the bare hand is much better able to appreciate the indications of too great tension and stretching. Bladder and rectum should receive proper attention. Chloroform to the surgical degree is a great aid. Work is much hampered by a resisting patient whose muscles are in a state of tension. In primiparæ it expedites matters to devote a few minutes to the stretching of the vaginal outlet, until the hand can be passed easily into the vagina. Time taken for this purpose is not lost for it facilitates the dilatation and renders the subsequent forceps-delivery easier.

The weighted speculum is then placed in position, the anterior lip of the cervix being seized by the volsellum forceps and drawn well down. The dilator is then introduced into the cervix with or without the detachable tips, depending upon the degree to which the os may already be open. As the dilation proceeds the shoulders of the tips will hold the instrument in place and the volsellum forceps may be removed. Care should be taken to see that the shoulders are well inside the uterus and not against the cervix itself.

There are several suggestions to be constantly borne in mind which will minimise the danger of laceration. In increasing the dilation the fingers should be kept on the rim of the cervix in order to gauge the tension that it is safe to produce. The screw should be released frequently in order to allow a return of cir-

culatation in the stretched tissue. The position of the instrument should be changed from time to time so that the pressure will not be at the same points continuously. It is impossible, of course, to lay down any rule as to the rate of dilatation, as all cases differ and the finger must be depended upon to indicate what each cervix will stand without laceration. It must be borne in mind in this connection that the indicator on the handle shows the dilatation under tension, and when that tension is relaxed the actual working size of the cervical ring is somewhat less.

All the criticism of the instrument is centered in its possibilities for injury and it must be conceded that carelessly used it may cause deep tears. I am inclined to believe, however, that some of the lacerations reported to be present after its use are the result of dragging the head through the cervix, and thus extending deeply by the forceps a comparatively slight tear caused by the dilator. This I know to have occurred in one of my own cases. Granting, however, that more or less laceration may occur, it seems hardly a valid reason for discarding the instrument, for in cases where the dilator finds indication the advantage for speedy delivery far overbalances a possible lacerated cervix in bringing it about.

As illustration, permit me to cite two cases:

CASE 1.—Mrs. D., 24 years old, in her first pregnancy was seized with violent convulsions about the time of her expected confinement. After the first few seizures return to consciousness did not take place but the convulsions recurred frequently. I saw her about seven hours after her first seizure. Chloroform and morphine had been used freely. She presented the usual picture of the advanced eclamptic; pulse rapid and weak; fetal heart rapid and the sounds indistinct. Immediate delivery was suggested with a view to possibly saving the child. Cervix firm and unyielding admitting a finger. Dilation with the Bossi and forceps delivery required one hour and twenty minutes. The eight pound child was born dead. The mother died four hours later. This case was a particularly difficult one to dilate and had I dilated manually, I am sure that I should have been obliged to resign the forceps to some one else.

CASE 2.—One morning Dr. Potter of Niagara Falls asked me to see sometime during the day Mrs. V., who was within three weeks of her second confinement. Despite appropriate treatment her urine contained increasing amounts of albumin and headache was beginning to be a troublesome feature. I saw the patient at two in the afternoon and learned that since I had been called her eyesight had failed completely. During my examination, a convulsion of moderate severity occurred. The cervix was undilated, thick, and unyielding. Immediate dilation and delivery required fifty minutes. Three mild convulsions occurred post-

partum. Mother and child both did well. Her urine never cleared up and the findings indicated an old nephritis.

Among the seven cases in which I have used the instrument two were of dry labor in which the patients were exhausted. Rigid firm cervix in both cases. In one I might have applied forceps at once but preferred first to dilate further. In none of the cases was there any serious tear.

In conclusion the views that I have tried to express in the foregoing are as follows: hydrostatic bags have a limited field in certain cases in which time is no object. Manual dilatation is of all methods the best where the strength of the operator and a yielding cervix makes it feasible. Instrumental dilatation is recommended in cases where the cervix is firm and unyielding. When used with a proper understanding it is no more liable to cause serious injury than injudicious manual dilatation, and it conserves the strength of the operator—a feature which is sometimes of the greatest importance.

1248 MAIN STREET.

SOCIETY PROCEEDINGS.

Medical Society of the County of Erie.

REPORTED BY FRANKLIN C. GRAM, M.D., Secretary.

[Received November, 1908.]

A REGULAR meeting of the Medical Society of the County of Erie was held in the rooms of the Society of Natural Sciences, Buffalo Library Building, Monday, October 12, 1908, at 8 p. m. The president, Dr. Edward Clark, in the chair. The minutes of the June meeting, also the minutes of the council meetings of June 29 and August 24 were read and approved.

Dr. McKee, chairman of the membership committee read the list of applicants for membership, as follows: H. W. Cowper, Harry E. Brauer, Leonard Reu, Arthur C. Schaefer. On motion of Dr. Bennett, action was deferred on these applications until the December meeting.

Treasurer Lytle reported certain correspondence which he had with Dr. Woodard, relative to the resignation of the latter. On motion of Dr. Bonnar, the resignation of Dr. Woodward was accepted as effective on the date of its presentation.

Similar action was taken in regard to Dr. Mary C. Hurlburt, who has removed from the county and is now a member of the society where she resides; also regarding Dr. Ira C. Brown, who is in the United States service and absent from the city.

Dr. J. D. Bonnar, chairman of special committee on con-

tagious disease hospital, made a verbal report of what the committee had done. A subcommittee, of which Dr. Rochester was chairman, worked with a similar committee from the Academy of Medicine. At a meeting of the entire committee held September 30, 1908, the conclusions of the subcommittee were presented and approved. This report was sent to the Common Council, and the entire matter is likewise up for presentation at a meeting of the Buffalo Academy of Medicine to be held October 14, 1908. This question was so well received throughout the city, that favorable resolutions have been adopted by many civic organisations. The matter will come up before the aldermanic committee on sanitary measures, Thursday, October 29, 1908, and Dr. Bonnar urged everyone to be present.

A letter, from Health Commissioner Wende, relative to the subject, was read, as follows: (This letter appeared in the November issue. 9 v. p. 220).

Dr. DeLancey Rochester, chairman of the subcommittee, briefly stated the work performed and then gave a summary of conclusions and results which were presented to the Common Council, as follows:

"To the Honorable the Common Council of the City of Buffalo:

The undersigned, being a committee of the Medical Society of the County of Erie, appointed for the purpose, do hereby petition your honorable body to take immediate steps for the establishment and maintenance of a city hospital for infectious diseases with a capacity for two hundred and fifty (250) patients. The reasons for this request is as follows:

1. During the year from July 1, 1907, to July 1, 1908, there occurred in the city of Buffalo the following numbers of cases of measles, 2,388; scarlet fever, 1,324; diphtheria, 440, and the following number of deaths from measles, 46; scarlet fever, 59; diphtheria, 65; distributed through the different months as per the attached table: There were per 10,000 inhabitants, measles, 60; scarlet fever, 33; diphtheria, 11.

2. The present hospital facilities for receiving such cases are utterly inadequate—the Sisters' hospital being able to accommodate 8 or 10, the Children's hospital, 10, the Erie County hospital, 8. These, we believe are the only institutions which will receive these cases.

3. By the very proper law of the city, all houses in which there are present certain infectious and contagious disease are quarantined for periods varying from two weeks to two months or more, according to the number and character of cases present.

4. When so quarantined, social or business relations are either entirely suspended or greatly diminished. While this is

of the greatest value to the health of the city at large, and, therefore, should not in any way be interfered with, it is a hardship upon the individual citizens which will be, to a great extent, obviated by the establishment of such a hospital. For example, if a case of such infectious disease occur in a hotel or boarding house, such hotel or boarding house must be quarantined and placarded: if a domestic employee come down with such disease, the house in which such employee lives must be quarantined and the children of the family kept out of school and the business of the other members of the family interfered with. Some families have the shop and house in the same building. In such cases, the business would be entirely stopped and the source of income interfered with. If such case occur in the family of a woman who goes out to work, her means of livelihood is stopped. If such case occur in a tenement house, the spread of disease is enormous and the impossibility of proper quarantine is evident.

5. The results of treatment of these cases in hospitals are much better than in private practice, both as to diminished death-rate and in the fewer serious sequels.

6. As a result of removal of such cases to hospitals, sources of infection are removed from the people and a fewer number of cases occur in the community, as proven by statistics of those places where such institutions exist—notably in Glasgow, Scotland, London, Eng., Boston, Massachusetts, and New York City. The figures for these places before and after the establishment of these hospitals are at hand if desired.

With these facts before you, we believe it unnecessary to present any prolonged argument as to the necessity of taking steps for the immediate establishment of such a hospital.

JOHN D. BONNAR,
HERMAN E. HAYD,

DELANCEY ROCHESTER,
LAWRENCE G. HANLEY.

Committee of Erie County Medical Society on the necessity for
a City Hospital for Infectious Diseases.

All these reports were received and the thanks of the society extended to the committee for the faithful performance of the duties imposed upon them. On motion of Dr. Rochester, the secretary was requested to read Dr. Wende's letter before the meeting of the Academy of Medicine, October 14 instant.

Dr. Rochester stated that the antisputting ordinance was not being lived up to as it ought to be, and thought it would be wise for the society to appoint a committee to frame certain proper placards regarding the matter. He moved that a committee of three be appointed by the president to take up the matter of

framing communications to the public, explaining the deleterious effects of spitting, and empowering the committee to place cards about the city.

Dr. John H. Grant moved an amendment to the motion "that the mottoes, when framed, be presented to the Department of Health so as not to be a charge against the society. The amendment was lost. Dr. Wall moved another amendment "that the committee estimate the cost of such work and submit the entire matter to the next meeting of the society. Dr. Rochester accepted the amendment. The motion, as amended, was then carried.

The President appointed as the committee, Drs. Rochester, Grosvenor, and Wall.

The scientific part of the program was then taken up.

N. G. Russell presented a paper entitled, Cerebral hemorrhage in the newly born; A. G. Bennett read a paper entitled, Some thoughts on sick headache; Helena Kuhlman presented A case of anxiety psychosis; George N. Jack read a paper on Lymph.

All the papers presented were discussed, after which the president thanked those who participated, especially those who had read such excellent papers at this meeting.

Meeting adjourned.

Washington International Congress of Tuberculosis, September-October, 1908.

**Channels of Entrance of Tuberculosis, by Samuel Bernheim, Paris, President
de "l'Oeuvre de la Tuberculose Humaine."**

DOCTOR Bernheim quotes a great number of clinical facts and experiments on animals from which he concludes, contrary to the opinion of Professor Calmette, that tuberculosis is chiefly transmitted by aerial germs and by way of respiratory tract.

1.—The clinical data furnished by pathological anatomy and by experiments since half a century, far from shaking the "aërogenic" doctrine of human tuberculosis, confirm on the contrary this ethiological conception, which sees in the respiratory tract a principal and usual point of entrance of the bacterial contagion.

2.—A great number of cases of tuberculous contagion by the dry bacilli of Koch incorporated in dry dust and numerous other objects, prove the virulence of this microbe even when it is not carried by a moist vehicle. The great facility of realising in man as well as in animals an experimental tuberculosis by inhalation,

argues in favor of the view that the respiratory path is a common channel of infection.

3.—The intestine as a door of entrance is possible, but it is far from being the normal and usual one. The frequency of human tuberculosis in the countries where the use of milk and meat is very limited, the slight mortality of children by tuberculosis during the period of lactation, demonstrate that their intestines play a role altogether secondary, although appreciable, as a channel of entrance of tuberculosis. Moreover, the necessity of large doses of tuberculous products to produce an experimental tuberculosis and the numerous failures in obtaining it, do not argue in favor of the "enterogenic" doctrine of human tuberculosis.

4.—The bacillary heredity of tuberculosis does not exist, exceptionally it may result from the hereditary contagion "in utero" and cannot be considered as an important factor in the contagion of tuberculosis.

5. The hereditary predisposition must be rejected, for infection in this way is in relation with the degree of "contagiosity" of the environment which produces phthisis, and with the frequency of contaminations.

6.—The vascular path is rare as channel of entrance of Koch's bacillus and it is very difficult to demonstrate its importance.

7.—The genital tract must be considered as a factor of some importance in the propagation of tuberculosis. The clinical observations and experiments demonstrate that this channel of entrance is far from being as rare as has been supposed.

8.—The anal orifice may serve as a channel of entrance to tubercular bacillus in the same conditions as the mucous membranes of the skin. The results concerning that mode of contamination are very numerous, we must then attribute an important ethiological role to this region of human body. The skin may serve as a channel of entrance to tuberculosis in conditions particularly favorable to "contamination" (infective traumatism) nevertheless, it could not be considered as a factor of first importance in the propagation of tuberculosis.

9.—The buccal mucous membrane in the children must be considered as a possible door of entrance for cervical tuberculosis (ganglionic).

Relations of Air with Tuberculosis—Sterilisation of Air.

From the whole of his work, the author concludes as follows:

1.—There exists a close relation between the microbes of air and tuberculosis. The more is the atmosphere full of bacterias, the greater is the number of tuberculous people living in this un-

healthy middle; all conscientious observers have noticed those evident facts. The name of Disease of Darkness has been given to tuberculosis, because microbes in general and particularly the bacilli of Koch, may be kept for a very long period under shelter of light. Under the influence of the normal lifetime of our habits, microbes are cast in the air, men breathe them, his lungs keep them, whence infection and often tubercular contagion.

2.—The absence, or at least the scarcity, of cases of tuberculosis in certain climates (neither altitude or the sea), are again proofs of the close relations between the microbes of the air and tuberculosis. This last disease is an exceptional one in those climates, where a meanest proportion of bacterias do exist. At a certain altitude even no seeds may be found in the air.

3.—For similar or rather inverse reasons a great number of tuberculous people has been observed in the great centers where the air is saturated with bacterias, in overcrowded districts, in places where meetings are held, in hospitals, in prisons, in schools, in barracks, in great shops, in administrations, in mills, in work-rooms, and the like.

4.—The best method to get rid of tuberculosis of an aerial origin, is to look after the salubrity of towns, the hygienism of houses where cleanliness must prevail and where solar light must be allowed to penetrate in great abundance. To these natural means certain artificial measures may be added as to lessen the danger caused by aerial bacterias. In fact, by means of certain apparatus of fuel, such as the tub of Dr. Goupil, or Mr. Silbermann's double current chimney, all microbes of the apartments may be destroyed on the spot. In other words, by this method of natural fuel, so full of microorganisms the air may be, it is easy to render it rapidly salubrious.

Those sanitary chimneys may be currently made use of in all apartments, and especially in medicine and surgery rooms, in amphitheatres, in large halls usually crowded and where agglomeration increases the danger of contagion.

Therapeutic Value of Tuberculins.

Resume of the report delivered at the International Congress of Tuberculosis (Washington, September-October, 1908) by Messrs. Samuel Bernheim, Président "de l'Oeuvre de la Tuberculose Humaine," and P. Barbier, physician to the antituberculosis dispensary for employes of the Post-Office of Paris.

After an historical exposition very much in detail which constitutes a complete review of the scientific researches undertaken during these last years, by the scientists of the whole world

with the purpose of discovering a specific remedy for consumption, the authors study the therapeutic value of various methods which have been proposed.

These methods can be divided into two principal groups:

1.—The methods of active immunisation, which necessitates on the part of the organism a reaction of defence ending with the production of specific antibodies.

2.—The methods of passive immunisation not necessitating any reaction on the organism to which are furnished certain ready formed antibodies.

Relying upon the recent works of Bordet on immunity, the authors agree with Professor Sahli in thinking that the future of serumtherapy in a chronic affection like tuberculosis is at the least doubtful.

The methods of active immunisation are themselves divided in two groups: (a) inoculation of bacterial cultures virulent or attenuated—tuberculin properly called: (b) inoculation of soluble products elaborated by microbes—toxins.

Amongst the numerous products proposed for active immunisation, the authors treat only of the most important, those which have been the object of sufficient experimental and clinical researches. They devote to each one a detailed study, examining one after the other, their nature, their mode of preparation, their physiological properties, the doses and the methods of employment, the indications for using and dangers, finally their reciprocal therapeutic value after experimental and clinical data. The authors examine thus in succession:

- 1.—The first tuberculin of Koch.
- 2.—The tuberculin T. R. of Koch.
- 3.—The bacillary emulsion of Koch.
- 4.—The filtered bouillon of Denys.
- 5.—The tuberculin of Maréchal.
- 6.—The tuberculin of Béranek.
- 7.—The tuberculin of Jacobs.

Several important facts arise from the clinical study of these various tuberculins. In the first place, this is the necessity of a prudent and methodical dosage of the tuberculin employed. If the Koch's tuberculin has failed this is due to the fact that it has been employed in too strong doses, which have provoked in the patient dangerous reactions which some have believed necessary. All the recent authors (Béranek, Sahli, Denys, Jacobs) are on the contrary in accord in recognising that one should avoid, as much as possible, every kind of reaction, even the least pro-

nounced, on the patient treated by injections of tuberculin. It is, therefore, necessary to commence with very weak doses, which are raised subsequently in following a gently increasing progression. In this way is opened the antituberculous immunisation of the organism by a sort of progressive tolerance to the tubercular toxin, by "mithridatisme" according to the accurate expression of Professor Sahli.

The opsonic method of Wright allows us at present to observe exactly the degree of the immunisation of the organism and the intensity of its defensive reaction in its struggle against bacillus of Koch. This method will, then, be for us a precious guide in deciding the question of the doses to employ and their progressive elevation; thanks to this method, the employment of tuberculin is not an empirical treatment but it is founded upon really scientific basis.

A second fact which results from the comparative study of these different tuberculins, is that all chance of success depends above all upon the state of the organic resistance of the patient. The latter ought to have a sufficient resistance to support the definitive reaction which is going to assure him the final victory in his war against Koch's bacillus. It is again the method of Wright which will inform us upon the value of this organic resistance, and consequently upon the utility of the treatment.

From the comparative study of these different tuberculins it results finally that it is those which contain the toxins present in the bacilli themselves (tuberculin of Béranek, and Jacobs), which are capable of possessing the most active immunising properties.

The authors have not had occasion to experiment personally with the Béranek's tuberculin. As to the tuberculin of Jacobs the very numerous observations (amounting to hundreds) which the authors have collected in their antituberculous dispensaries show at the same time the perfect innocuousness of this product, and its remarkable activity in the most different manifestations of the tubercular infection.

In persons with a tendency to hemophilia slight injuries to a joint may be rapidly followed by swelling due to effusion of blood into the synovial sac and severe pain. In such cases there is no rise of temperature nor constitutional disturbances indicating an inflammatory process and the effusion often subsides completely without leaving any traces of its presence.—*International Journal Surgery*.

SELECTION

The American Fleet at Auckland.

American Naval Surgeons Entertained by Medical Men of New Zealand

[*New Zealand Medical Journal*, August, 1908]

ON the occasion of the visit of the American Fleet to Auckland, the Auckland Division of the B.M.A. entertained the visiting Naval Surgeons at the Northern Club, on the evening of Friday, August 14, 1908. The entertainment took the form of a supper and smoke concert, to which items were contributed by medical men and leading local amateurs.

Dr. Tracy Inglis, President of the Auckland Division, was in the chair. The meeting was a most representative one, there being present Fleet Surgeon Curtis, and 20 surgeons from the fleet, Staff-Surgeon Glazebrook, H.M.S. Encounter, Surgeon Murphy, H.M.S. Pioneer, about 40 members of the local division, many of whom had traveled long distances in order to be present; Dr. Mason, Dr. Chapple, M.P., and Dr. Martin (Wellington); Dr. Maurice (Greymouth). In addition to members of the medical profession, there were present the American Vice Consul, Hon. J. Mitchelson, Messrs. Gresham (Córoner), Kirker, and Bagnol (Fleet Reception Committee), and H. M. Gore.

His Excellency the Governor, the Premier, the Minister of Public Health, and the Mayor were unavoidably absent as they were being entertained by Admiral Sperry.

The president, in extending a hearty welcome to the guests, said:

Gentlemen: I feel it a great privilege that it devolves upon me as President of this Division of the B.M.A. to be able to say a few words of welcome to such an assemblage of medical men, and especially to those of you who come from the great English speaking country, America.

In sending a battleship fleet round the world, the United States has demonstrated not only the will, but the power, to have a large voice in the future settlement of eastern questions. In this matter I am sure all members of the profession hope the results will tend to the preservation of peace; and on such a unique occasion as the present, we have felt it to be a great privilege to welcome to our midst, the medical men attached to the fleet, and we hope that they will take away with them the most pleasant recollections of their stay in New Zealand waters.

In my opinion there is no better training for a naval surgeon than is afforded by the experience of long sea voyages, as

they give him opportunities of doing his work under circumstances approximating those of actual warfare. In a voyage such as the present, you have also the advantage of studying the application of surgical and medical methods under conditions, often difficult, and in constantly varying climates, which must at times test your ingenuity to the utmost. I have no doubt that you, gentlemen, our guests tonight, will, when you once more reach your native shores, be able to add something from the result of your experience to the sum of human knowledge, as far as medicine, and possibly in a greater degree still, surgery are concerned.

There are, gentlemen, quite a number of risks which, as a profession, we run—even on shore—in carrying out our daily routine; but I consider a naval surgeon, in time of war, requires more courage to successfully perform his duty than most of the actual combatants. He has all the risks without the excitement of actual fighting to sustain him in the emergency. Therefore, we quite realise that in the branch of the profession which you have chosen, the value of such an experience as your extended cruise enables you to enjoy, is one which could not be over estimated.

Today the American Schools of Medicine and Surgery are becoming of more and more importance, and are bidding fair to rival the schools of the Old World, as during the past twenty years or so, they have already done in dentistry. The names of the Mayo Brothers, Howard Kelly, Senn and Keen in Surgery, and Osler and Holt in Medicine, are famous throughout the medical world, and, being those of your own countrymen, they must perforce have become household words to you; in this connection I am sure that you will all agree that the rapid advancement which has distinguished the American Schools during the last generation has largely been made possible by the splendid monetary endowments by the rich among your countrymen, who have, perhaps more than any other nationality in the world, furthered the interests of humanity, by increasing the usefulness of the profession to which we all have the honor to belong. I should like also to refer to the splendid work done by your countryman Carroll, in the investigation of yellow fever, which rivals in brilliancy the work of Ross and Bruce in connection with malaria and sleeping sickness. Again we have the brilliant work by the American Naval and Army Staff, who have fought disease in the Canal Zone. By the researches of Gorgas and others, they have made that district habitable, and deserve the highest credit for the wonderfully low mortality from dysentery, malaria, and yellow fever. The work of your Naval and Army Staff in this

connection shines out all the more brilliantly, when we recall the ravages of disease amongst those who first attempted the work of forming the Panama Canal.

There is another point in which your countrymen excel, and one which has left the doctors of all nations under an obligation which cannot be over-estimated. I refer to the manner in which your medical books have been produced. The superb illustrations and diagrams in some of your surgical publications are admired and envied by us all, and the adaptation in America of trichromatic printing to the reproduction of technical and scientific illustrations has made the most complex problems very much easier to understand.

I am sure, Gentlemen, that your cruise must have been most instructive, and though, of necessity, you may have had to bear the burden of a great deal of social entertainment whilst on shore. I only hope that in the informal and Bohemian welcome of your medical confrères in this city, you will find something of pleasure to remember after your travels are over, and the glamor of an historic occasion has passed away.

I have also much pleasure in welcoming this evening, the other distinguished visitors who have honored us with their presence, and I sincerely hope they will spend a pleasant evening. Now, Gentlemen, we have a long program which I hope you will all thoroughly enjoy, and, in conclusion I must again express my pleasure at having the privilege of welcoming you here."

After the toasts "The King," "The President U.S.A.," had been submitted by Dr. Inglis and drunk with musical honors, Dr. McDowell proposed the toast "The Fleet Surgeon and Surgeons of the American Fleet."

Dr. McDowell, in proposing the toast of the evening said: "Mr. President, Fleet Surgeon Curtis and Gentlemen, I rise to propose the health of "The Fleet Surgeon, and the Surgeons of the American Fleet." Conscious of the honor of this pleasant duty being placed in my hands on this historic occasion, and proud of being the medium of conveying to our guests the most cordial and enthusiastic fraternal greetings, not only from the members of the Auckland Division, but from the whole of the British Medical Association of New Zealand."

"As an Aucklander by birth, I would like to say at the outset how fully I share in the gratification of our community that the first meeting of the Great White Fleet with the representatives of the British Navy, has taken place in the Waitemata, whose meaning, "sparkling, peaceful water," is surely a happy omen. We have heard a great deal this week of the strong ties

which link our two nations together—a common race, language, literature and religion: but the most powerful bond of all is manifested by this company tonight—that of a common calling, a professional brotherhood. We are comrades in arms in the ceaseless warfare against disease, deformity and death. Our minds are bent upon the solutions of the same great problems, and our hands are trained by the same methods to do deftly the work required of them, and our hearts are stirred by the same impulses and aspirations to prevent, to cure, or to assuage the ills of human kind."

"We welcome our guests, in the first place, as distinguished representatives of American medicine, the great names of which we honor, and the splendid achievements of which we gratefully recognise along with them. Let me mention but three names as typical of many esteemed original contributors to the advancement of surgical and medical science since the beginning of last century. Ephriam McDowell, of Kentucky, the "Father of Ovariectomy," James Marion Sims, the celebrated gynecologist and founder of hospitals for women, and Oliver Wendell Holmes, for although as the genial 'Autocrat of the Breakfast Table,' he won fame and love in circles far beyond that of medicine, yet it is well to recall the fact that by his essay on "The Contagiousness of Puerperal Fever," published so far back as 1843, he anticipated by a generation the findings of science in a most important department of pathology. To some of the latter masters of American medicine our president has alluded in his introductory words of welcome, and if you could go the rounds of our private libraries you would find the textbooks of these great authorities in surgery, gynecology and medicine standing cheek by jowl with those of our own British writers, and I am bound to say they would, in many cases, give evidence of more extensive usage. Your current medical literature such as the *Therapeutic Gazette*, that excellent compendium of up-to-date information has a wide circulation amongst us, and the *Journal of the American Medical Association*, and other periodicals are read and valued by us. But, after all, the paramount example of the community of interest in medical affairs throughout Anglo-Saxondom is furnished by the career of Professor William Osler, by birth a native of our sister Dominion of Canada, he made his early reputation at McGill University, Montreal, and then he was called by America to the great Johns Hopkins University, where he firmly established his fame, and finally, as was most fitting, the Motherland claimed him as her own, and honored him with the best post in her gift, that of Regius Professor of Medicine at Oxford."

"We welcome our guests, in the second place, as experts in a particular branch of medicine. This is, as we all recognise, the day of specialism. I was reading the other day—I think it was in one of your own magazines—about a speaker, who was descanting upon this very topic at a medical congress. He had just declared that if the human body was divided into two halves by a line drawn around it at a level of the umbilicus, the upper half would be claimed as the exclusive concern of one group of specialists, and the lower half by another distinct group, when he was interrupted by a voice calling out "you would omit by that division of the body the most important specialists of all, the Naval Surgeons."

Well, gentlemen, I feel sure that in all seriousness we are ready to admit tonight that the Naval Surgeons, especially those of the American Navy, judged by their exploits of the past decade, are indeed, to be classed among the most important of all specialists. They have had an opportunity of demonstrating their quality in warfare, but they have, above all, distinguished themselves in conquests of peace in the realms of public hygiene and tropical medicine, for have they not, in conjunction with their sister military service, practically succeeded in banishing yellow fever, malaria, and other devastating pests from the new possessions of the United States in Cuba, Porto Rico, the Philippines, and Panama?"

"A minor chord in our enjoyment tonight is the thought that at an early hour tomorrow morning we must say farewell to our new-found friends. We have felt greatly honored by your presence among us, we have much enjoyed our brief companionship with you, and we now desire to give you as brotherly a send-off as lies in our power. We trust you will have a real good time, or in your own expressive phrase a "bully" time, and we hope that when you finally bid adieu to Australia, you will carry away the feeling that your "John Bully" time has been the most "bully" of all your "bully" times."

"Last Sunday morning the Union Jack and the Stars and Stripes floated side by side to welcome the Fleet's arrival, but now, at the close of the week, after such happy intimacy, we realise that the officers and men of the American Navy have drawn the flags nearer together, yea have, indeed succeeded in entwining them together into a fair and firm "sailor's knot."

"I now call upon you to charge your glasses and drink to the health of the Surgeons of the Fleet, the pioneers in this good work, and let us also toast to the dawning of the day, when, with a fuller knowledge, and a freer intercourse, the "sailor's knot" will be transformed into a "true lover's knot," a fit symbol of

the relations between the two branches of the Anglo-Saxon race, a mighty duality in unity, a power making for liberty, equality and fraternity among the nations of the earth."

Fleet Surgeon Curtis, in reply, related some of his experiences during the visit of the Fleet to the South American ports, and referred to the excellent work which had been done in Rio Janiero by medical experts who had now made it one of the healthiest and cleanest of cities in the world—a contrast to what it was a short time ago—a hotbed of smallpox and yellow fever. Nowhere had they met with a more friendly welcome than in Auckland, and they had been greatly impressed with the beautiful scenery, excellent climate, and general prosperity of the city."

In a speech replete with characteristic American humor, Surgeon Blackwood replied on behalf of the surgeons of the Fleet. Dr. Bedford then proposed the toast "The Visitors."

A most enjoyable musical program arranged by T. E. Midgely was submitted. Items were contributed by surgeon Traynor (U.S.S. Georgia, Drs. Mason, La Praibe and Guinness, the Lyric Quartette, and Messrs. Manning, Abrahams, Poore and Meeston.

The meeting, which will live long in the memories of all who were present, was marked throughout with enthusiasm and *camaraderie*, and many will look with pleasure to renewing acquaintance with members of the profession as represented in the American Fleet.

ABSTRACT.

A New Combination for the Treatment of Hepatic Derangements.

By ARTHUR WEGEFARTH, M.D.

Associate Professor of Clinical Medicine in Baltimore Medical College.
Attending Physician Maryland General Hospital, Baltimore.

NEARLY a year ago I began the clinical investigation in the therapeutic value of a mixture of acid sodium oleate, sodium salicylate, phenolphthalein, and menthol, for the relief of derangements of the hepatic mechanism, which, in my experience, have been somewhat difficult to satisfactorily treat by purely medicinal means. The formula used in my clinical experiments was as follows:

Acid sodium oleate,	1½ grains
Sodium salicylate	1½ grains
Phenolphthalein	1-3 grains
Menthol	1-10 grains

combined in a soft mass and exhibited as a pill with a thin coating. This combination has since been offered upon the market under the name of "Pill Cholelith." The following three cases fairly illustrate the conditions in which I have found this combination very successful:

CASE 1.—Mary E. C., married, age 44 years, came to me complaining of being constantly sick at the stomach, very nervous, suffering from headache. She admitted being constipated, the bowels moving only every two or three days. She stated that this condition had been present practically all of the time for the last six years. Her tongue was heavily coated, her face thoroughly hyperemic; there were soft acne pustules on the side of her nose. And she had lost a great deal of weight in the past twelve months. An examination showed that the heart was normal; the urine analysis was negative; her liver was noticeably diminished in size and hard and irregular in outline. I considered this a case of cirrhosis, and a little diplomatic questioning disclosed the fact that the patient was addicted to drink. I started the treatment with administration of one of the pills referred to above every three hours. In less than a week the patient's condition was greatly improved. Constipation was relieved, bowel movement becoming quite frequent; the patient's appetite was much better and sleeplessness of which she complained was much relieved. At this time, the patient disappeared and, I learned later had started to drink heavily. Two months afterwards, I was called to see the patient again and found her original condition reestablished. Tongue was again heavily coated; she was constipated; the nervousness was once more present. The pills were again administered one every three hours, and the patient improved rapidly. I am convinced that if this patient could have been controlled and subjected to a continued course of treatment, that she would have completely recovered.

CASE 2.—Henry F. W., age 35. Complained of constant headache in the occipital region; chilly feeling; aching sensation over the body; constipation constantly present. From his description it is believed that he had periodic attacks of jaundice; he had no appetite; his tongue was heavily coated; the conjunctiva of each eye was decidedly yellow, showing jaundice. This was evidently a case of hepatic congestion, and the pills were ordered one every three hours. Shortly after the treatment was instituted the patient's condition rapidly improved, which good reports were continued as long as the treatment was kept up. The case could not be followed as he was exceedingly irregular in his visits. As a consequence this case is not very satisfactory, but illustrates the good effect of the combination in such conditions.

CASE 3.—Mrs. P. H. F., age 54, married. Gave a history of having gallstone colic and jaundice. Had just recovered from a

severe attack of colic accompanied by pain and jaundice. Her tongue was very heavily coated; she was constantly nauseated and badly constipated; the region over the liver was very tender. The pills were administered one every three hours, and in a very short time the tongue cleared, the bowel movement became normal, nausea disappeared, the appetite returned and the stain on the tissues from the bile cleared up very nicely.

This case illustrates very well the satisfactory results from the combination in cases of gallstone colic.

It has been my habit to recommend the pill every three hours, taken with large amounts of hot water, to prohibit all alcoholic drinks and all indigestible foods. The beneficial effect of the combination upon the liver and intestines is quite marked.

SOUTHEAST CORNER EUTAW PLACE AND NORTH AVE.

TOPICS OF PUBLIC INTEREST.

Medicolegal.

THE following is a decision of interest relating to the practice of Medicine, *The People of the State of New York, respondent, v. John H. Woodbury Dermatological Institute, appellant.*

1. Corporation Advertising to Practise Medicine—L. 1907, ch. 344, sec. 15. A corporation organised under the provisions of L. 1848, ch. 40, authorising the formation of corporations for manufacturing, mining, mechanical or chemical purposes, which advertises to practise medicine, may be convicted under the provisions of L. 1907, ch. 344, sec. 15, providing that "any person not registered as a physician who shall advertise to practise medicine, shall be guilty of a misdemeanor."

2. Hospitals, infirmaries and similar institutions—Words "any person" include corporation. While the words "any person" include a corporation as well as an individual under section 5 of the Statutory Construction Law (L. 1892, ch. 677), they were nevertheless not intended to apply to hospitals, infirmaries and similar institutions organised under the provisions of section 80 of the Membership Corporations Law (L. 1895, ch. 559, as amended by L. 1900, ch. 404) which have legislative authority for the practice of medicine.

People v. Woodbury Dermatological Inst., 124 App. Div., 877, affirmed. (Argued June 1, 1908; decided September 29, 1908.)

Appeal from an order of the Appellate Division of the Supreme Court in the first judicial department, entered March

20, 1908, which affirmed a judgment of the court of special sessions of the city of New York convicting the defendant of the misdemeanor of unlawfully advertising to practise medicine without authorisation and registration. The facts, so far as material, are stated in the opinion.

Roswell S. Nichols for appellant. The defendant did not advertise to practise medicine within the meaning of the act. (*S. E. M. Inst. v. State*, 103 N. W. Rep., 1078; *S. E. M. Inst. v. Platner*, 103 N. W. Rep., 1079; *Underwood v. Scott*, 32 Pac. Rep., 942; *People v. Allcutt*, 117 App. Div., 546.) It was not the intention of the legislature to include corporations when it used the word "person" in chapter 344 of the Laws of 1907. (*Manhattan Co. v. Kaldenberg*, 165 N. Y., 1; *Burke v. Basso*, 180 N. Y., 341; *Smith v. B. & A. R. R. Co.*, 99 App. Div., 94; 181 N. Y., 132; *H. B. Co. v. Hand*, 104 App. Div., 390; *Pharmaceutical Society v. L. & P. S. Co.*, L. R. (5 App. Cas.), 857; *O'Duffy v. Jaffe, Surgeon Dentist, Ltd.*, L. R. (2 Ir. Rep., 1904), 27; *Parks, Gunston & Lee v. Ward*, L. R. (2 K. B. Div.), 1; *Beastone v. F. Bank*, 12 Pet., 102). Section 5 of the Statutory Construction Law does not require the courts to construe the word "person" to include a corporation, where it appears that the legislature did not so intend. (*People v. U. Ins. Co.*, 15 Johns., 358; *Stack v. City of Brooklyn*, 150 N. Y., 335; *Spencer v. Meyer*, 150 N. Y., 269; *People ex rel Wood v. Lacombe*, 99 N. Y., 43; *Dallman v. Moore*, 70 Miss., 267.)

William Travers Jerome, District Attorney (Robert S. Johnstone of counsel), for respondent. The word "person" in the statute includes a corporation. (L. 1907, ch. 344; *Dent v. West Virginia*, 129 U. S., 114; *Ottaway v. Lowden*, 172 N. Y., 129; *People ex rel. Armstrong v. Warden*, 183 N. Y., 223; *O'Brien v. Mayor, etc.*, 139 N. Y., 548; *Risley v. Phoenix Bank*, 83 N. Y., 318; *P. Society v. Supply Co.*, 5 App. Cas., 857; *Brown v. Mayor, etc.*, 66 N. Y., 385; *Hannon v. S. C. Co.*, 167 N. Y., 244; *Deaton v. Lawson*, 82 Pac. Rep., 879; *Matter of Neagle*, 139 U. S., 1; *People v. Girard*, 145 N. Y., 105.

Willard Bartlett, J. The statute now in force which regulates the practice of medicine in this state provides "any person not a registered physician who shall advertise to practice medicine, shall be guilty of a misdemeanor". (Laws of 1907, chap. 344, Sec. 15.)

The district attorney of the county of New York laid an information before the Court of Special Sessions, accusing the defendant of the crime of unlawfully advertising to practise medicine in violation of this prohibition. The defendant was convicted upon proof sufficient to establish the fact that it had so advertised. It was contended before the trial court, however, and

it is contended here, that a corporation is not chargeable with liability under the statute because the word "person" as used therein, cannot be held to apply to a corporation at all, but is exclusively applicable to an individual human being. The prosecution answered this proposition by reference to the Statutory Construction Law (Laws of 1892, chap. 677, sec. 5) which provides that "the term person includes a corporation and a joint stock association." The defendant replied that the provision quoted from section 5 of the Statutory Construction Law is qualified by the limitation contained in Section 1 of the same act, which declares that the chapter is "applicable to every statute unless its general object or the context of the language construed, or other provisions of law indicate that a different meaning or application was intended from that required to be given by this chapter." The argument of the defendant is that the context in the general act of 1907, regulating the practice of medicine, which contains the prohibition against advertising to practise medicine by any person, not a registered physician, indicates conclusively that "any person" therein mentioned could not possibly have been intended to mean "any corporation." The Court of Special Sessions, however, and the Appellate Division (with no dissenting judge) reached a contrary conclusion, holding that artificial persons as well as natural persons fell within the prohibition of the statute. Mr. Justice Ingraham, who wrote one of the opinions for the majority of the Appellate Division, called attention to the fact, that the provision in the Statutory Construction Law to the effect that the term person includes a corporation, was taken from 718 of the Penal Code, and section 955 of the Code of Criminal Procedure, which were repealed by section 37 of the Statutory Construction Law itself. This substitution and repeal, seemed to him clearly indicative of the intention of the legislature to make the provision of the Statutory Construction Law, applicable to all cases in which a corporation had committed an act which by law was made a criminal offense if committed by a natural person.

The only difficulty involved in the adoption of this view grows out of the existence of hospitals, dispensaries and similar corporate institutions which are unquestionably authorised by law to practise medicine—although, of course, only through the agency of natural persons who are duly registered as physicians. The defendant was incorporated under the act of February 17, 1848 (L. 1848, ch. 40), to authorise the formation of corporations for manufacturing, mining, mechanical or chemical purposes, and the objects for which it was formed were stated in the certificate of incorporation as follows: "The carrying on of business of manufacturing chemical preparations and printing, publishing and sell-

ing books and pamphlets relating to the same and advertising same." There could be no suggestion or pretense that this was a hospital corporation or dispensary. In reference, however, to hospitals and dispensaries it could hardly have been the intention of the legislature in the act of 1907, to prohibit such corporations from advertising to do what they might do lawfully—that is to say, from advertising to practise medicine; yet it is argued that if we hold that the act of 1907, makes it a misdemeanor for any corporation (making the term "person" embrace a corporation) to advertise to practice medicine, we must also hold that incorporated hospitals and dispensaries fall within the prohibition. If this were the necessary result of the construction adopted in the courts below, I think it would furnish a strong reason for rejecting that construction.

It seems to me, however, that we can affirm this judgment without in any wise denying the lawful right of hospitals, dispensaries and similar corporate institutions to advertise their readiness to exercise their lawful functions; and this simply for the reason that the general medical law of 1907, is obviously not intended to apply to the case of such corporations at all. In other words, the prohibitions therein contained against the practice of medicine, without lawful registration in this state or in violation of any of the provisions of the statute or against advertising by any person not a registered physician, were not intended to apply and plainly could not reasonably be held to apply to corporate bodies which by the express provisions of other statutes, are authorised to carry on the practice of medicine upon compliance with their provisions and without registration.

The incorporation of hospitals is provided for in section 80 of the Membership Corporations Law (L. 1895, ch. 559, as amended by L. 1900, ch. 404). Five or more persons may become a corporation for the purpose of erecting, establishing or maintaining "a hospital, infirmary, dispensary, or home for invalids, aged, or indigent persons," by making the prescribed certificate and obtaining the written approval of the state board of charities and a justice of the Supreme Court of the district in which the principal office or place of business of the corporation is to be located. The statute expressly provides that "the systems of medical practice or treatment to be used or applied in such hospitals, infirmary, dispensary or home" may be specified in the certificate. Thus, a hospital duly incorporated under the Membership Corporations Law unquestionably holds itself out as being able to diagnosticate, treat, operate and prescribe for human disease, pain, injury, deformity or physical condition; and such corporations do in fact offer and undertake publicly and frequently

through the agency of advertisements to diagnosticate, treat, operate and prescribe for such diseases. An institution of this character, possessing legislative authority to practise medicine by means of its staff of registered physicians and surgeons, comes under the direct sanction of the law in so doing, and by the plainest implication under well-settled rules of statutory construction relating to enactments dealing with the same general subject-matter, are excepted from the operation of the act of 1907, under which the defendant was convicted.

It is suggested in behalf of the appellant that to attribute to the legislature a design to prohibit a corporation which is not registered as a physician from advertising to practise medicine, is to charge the lawmakers with doing an absurd act, inasmuch as it is impossible under the law for a corporation to register as a physician. There is nothing in this point. It might just as well be urged that there is no need of a law prohibiting a minor from voting, since everybody knows that a minor has no legal right to vote. This fact does not prevent illegal attempts on the part of minors to exercise the right of suffrage, and the facts in the present case show that a corporation may undertake to practise medicine without authority of law.

Believing as I do, that the construction of section 15 of Chapter 344 of the Laws of 1907, adopted by the courts below, may be sustained without affecting the rights of incorporated hospitals or dispensaries, I think the judgment of conviction was correct and should be affirmed.

Culle, Ch. J., Gray, Haight, Werner, Hiscock and Chase, JJ., concur. Judgment of conviction affirmed.

People v. Woodbury Dermatological Inst., 192 N. Y., Rep., 454; Adv. Sheets No. 409, October 31, 1908.

W. E. DEEKS of Ancon, Panama, gives four types of malarial fever as seen on the Isthmus of Panama, although the quartan is not endemic there. These types differ microscopically in the development of crescents or not, in their life history, in perniciousness, and in their course. Most of the malaria is curable by quinine. Rarely it affects the brain with few constitutional symptoms present. In cerebral cases quinine is given hypodermically in twenty grain doses, every two hours, up to sixty or eighty grains of the hydrochlorate of quinine and urea. Post-febrile toxemia is common and important. Forty per cent. of cases develop albuminuria which in general clears up, but when this is not the case results in a chronic interstitial nephritis. Kidney symptoms and very low tension pulse indicate acute toxemia. This is more often the case in the colored than in the white race. —*Medical Record*, November 21, 1908.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

All communications, whether of a literary or business nature, books for review and exchanges, should be addressed to the editor, 238 DELAWARE AVENUE, BUFFALO, N. Y.

VOL. LXIV.

DECEMBER, 1908.

No. 5

Influence of Smoke on Health

UNDER this title the *New York Tribune* recently discussed editorially a question which concerns the welfare of people living in large cities in a constantly increasing degree. At the present time, Buffalo is urging the increase of its manufacturing plants, is inviting with alluring offers of advantages, additional smoke-producing factories to locate within the boundaries of this attractive city. For years, Buffalo has been one of the most delightful of summer cities, one of the most comfortable all-the-year-round cities for the residential population, and especially, has it been attractive to the summer tourist.

Of late, however, the smoke nuisance has taken on such large proportions, that the thoughtful citizen who would regard health as quite necessary to prosperity, even indispensable thereto, has begun to inquire if it may not be necessary for the municipality to adopt stringent measures to restrain the already existing volume of smoke output, as well as to prevent any further increase which may result from incoming manufacturing plants. We do not wish to be understood as against progress, as opposed to the material interests of this great and constantly growing city, but we would not have its fair name and fame as a healthful place of residence injured or abused by creating an unhealthful environment for the residential population.

In the issue of the JOURNAL for January, 1906, Dr. Dewitt C. Greene, of this city, presented the evils growing up around the smoke nuisance in a thoroughly practical and scientific fashion. We advise all interested to read it or reread it as the case may be, for it will bear repetition in the reading if it has been read but once. In this relation we invite attention to the article in *The Tribune* already referred to, and which we reproduce for the benefit of our readers:

INFLUENCE OF SMOKE ON HEALTH.

What may be considered from the physician's point of view the most hurtful effects of soft coal smoke are pointed out in *The New York Medical Record* by Dr. John W. Wainwright, of this city. One of them is that it robs a community of the sunlight which is essential to physical wellbeing. Another is that the imperfect combustion which liberates unconsumed particles of carbon also generates poisonous gases. A third is that in order to exclude the soot from their houses many persons shut their windows, and breathe a vitiated atmosphere indoors. Dr. Wainwright does not believe that smoke exercises a germicidal influence. On the contrary, he thinks that there is some relation between the heavy mortality from tuberculosis in big towns like Manchester and Leeds, England, and the smudge with which they are continually overhung. Indirect as well as direct harm is attributed by Dr. Wainwright to the same agent. In his opinion, by depressing the spirits and causing mental irritation it aggravates the condition of those who suffer from certain diseases of the heart and nervous system.

Much mischief is also done by smoke to clothing and merchandise. A Chicago man asserts that the damage to his goods in a single year from this cause amounted to \$200,000, and the statement is not absolutely incredible. Still, if it is true, what must be the losses in the whole city where he lives, and in a score of other places in the west afflicted in the same manner?

Fortunately, New York city has been bothered much less than many other large centers of population by this nuisance, but the increasing use of soft coal and carelessness in the use of it made corrective measures necessary here. In one other respect the metropolis is exceptionally favored. The enforcement of the ordinance forbidding the production of smoke in New York is undertaken by the Board of Health, which has practically unlimited authority in regard to anything which it pronounces unsanitary. Dr. Wainwright's article shows how ample is the justification for the energetic policy of Dr. Darlington, and to those cities in which the official crusade against smoke is a farce, a careful study of the charter of New York is respectfully commended.

It is quite important that this question should be dealt with intelligently before it grows to inordinate proportions, before its power for evil becomes too great, before the smoke creators become so strong as to resist successfully the more timid sanitarians.

In the city of New York, a group of influential women have been battling against the nuisance created by unnecessary noises, and they have succeeded in stopping them in a very considerable degree. Why should not the patriotic and home-loving women of Buffalo take up the consideration of the influence of smoke on health with a view to create, through an educational campaign,

a public sentiment that will restrain and ultimately stamp out the unnecessary making of smoke?

Dr. Frank P. Foster.

IN the November issue of the JOURNAL, the newly created Medical Reserve Corps of the Army was dealt with in some detail. In that article reference was made to the fact that Dr. Frank P. Foster, among others, had been appointed a medical officer in that corps, with the rank of first lieutenant, the highest rank bestowed by an initial commission. Dr. Foster is the widely known editor of the *New York Medical Journal*, and through its columns has been a consistent advocate of reforms in the medical service of the army, as well as an ardent supporter of the policies of the surgeon general relating to placing the medical corps upon a high plain of preparedness, that it may always be in complete readiness for any sudden demand for its services.

One Saturday afternoon, in the late November days, a group of men known as the "Fensophs" gathered in the club rooms of the organisation and celebrated Dr. Foster's appointment in a most appropriate manner. The meeting was called ostensibly to celebrate Dr. Foster's birth day, he himself having been for a long time dean of the Fensophs. The real object of the meeting however, was to present to the new medical officer a sword appropriate to his rank and corps, this purpose being adroitly concealed from the recipient, as we have already hinted. The subterfuge worked admirably; the dean was taken completely by surprise in his own camp when Mr. Newell, one of the gifted Fensoph's arose and delivered a fitting presentation speech, at the close of which advancing to the head of the table and placing the sword, with its beautifully embossed blade, containing the names of the donors, in the hands of the dean, now a medical officer in the United States Army Reserve Corps.

The club rooms were appropriately decorated with army colors, flags, and other fitting insignia. The feast was made up of a grouping of good things to eat, drink and smoke; there was a camaraderie of fellowship in the air, the speeches were sparkling and bright, and altogether it was a day long to be remembered by the Fensophs in the honor they did their beloved Dean.

DECLARATION was made recently by Dr. William H. Maxwell, city superintendent of schools in New York, says the *Evening Mail*, that adenoids in children are so alarmingly baneful that they produce depravity in boys and girls who have them.

Dr. Maxwell made this statement in asserting that it was imperative that the Board of Education be clothed with power to

compel parents of children so affected to have the adenoid growths removed. If they are permitted to remain the child is almost certain to develop criminal tendencies, said Dr. Maxwell. "We have found that pupils with adenoids and enlarged tonsils, are the ones who make the noise in the classroom, defy their teachers and are generally incorrigible.

OPERATION MAKES BAD BOY GOOD.

In those children who have had the adenoid growths removed there has been an immediate improvement in behavior and intelligence, while in children whose parents refuse to permit them to be treated, the child grows steadily worse in disposition and morals. So serious are the evils of this particular throat affliction that to them can be traced criminal tendencies which develop in boys after they have grown up.

This is a topic of sufficient importance to engage the attention of the school inspectors in Buffalo, and should be taken up at an early period in each child's school life.

"MORAL ANESTHESIA" is the latest defence announced for crime involving plotting against life. This plea was offered recently in Chicago, for a girl charged with attempting to plot the murder of her mother, and was accepted by the court. A deadening of the moral perceptions would serve to cover a multitude of crimes, could it be established as an orthodox answer in the courts. It sounds better than the hackneyed "insanity"—insane while committing the crime, sane a moment before and a moment afterward, does not fit scientific medicine, however much courts and juries may be pleased to accept it.

NOT more than 25 per cent. of parents who are notified by the school board in New York, that their children require treatment of one kind or other for eyes, teeth or throat comply with the request to have the children looked after.

It is because of this fact, and the baneful effects of adenoid growths in the throat, that it is imperative that there should be legislation investing the school authorities with absolute power to compel children to have these growths removed.

The law gives the board the right to put away boys and girls who are ungovernable. They are sent from school to school to see if changed surroundings will benefit them, and when all else fails they are sent to reformatories. But before they are put away they are examined for the insidious growths, and in many cases their removal restores the child to reasonableness and good behavior and brings about increased intelligence and capacity for study.

PROFESSOR William E. Castle, of Harvard University, asserts that he has discovered a mathematical and precise rule which will determine the sex of higher animals. He has bred two freak varieties of guinea pigs, which he says give to the world the first tangible evidence that fixed laws govern sex production.

DR. WILLIAM WARREN POTTER of Buffalo, was elected president of the State Board of Medical Examiners and Dr. William S. Searle of Brooklyn, vice-president, at the annual meeting held at Albany, November 16, 1908.

The board placed itself on record in favor of the six year combined baccalaureate and medical course. Arrangements were made for the preparation of a medical syllabus in keeping with the suggestions of prominent medical educators, and the committee of which Dr. Lee H. Smith of Buffalo is chairman was continued in power. The assignments to the various subheads of medicine were voted as follows:

Physiology, Dr. R. H. Williams of Rochester; anatomy, Dr. William S. Ely of Rochester; hygiene and sanitation, Dr. Eugene Beach of Gloversville; chemistry, Dr. F. S. Farnsworth of Plattsburg; surgery, Dr. F. S. Crandall of New York; obstetrics and gynecology, Dr. W. W. Potter of Buffalo; bacteriology, Dr. F. W. Adriance of Elmira; pathology, Dr. Lee H. Smith of Buffalo; diagnosis, Dr. William S. Searle of Brooklyn.

The following were elected members of the question committee: Drs. Smith, Potter, Adriance and Williams.

IN explanation of the wrecking of railway trains, some of the speakers at the recent annual meeting of the New York and New England Association of Railway Surgeons, said love, liquor, gambling, and improper signals were some of the things responsible for many fatal railroad accidents.

Dr. R. W. Corwin of Pueblo, Col., told of a young engineer, who, through jealousy, neglected his work, with the result that his train was wrecked. He told of another engineer who, while worrying over the fact that the night before he had gambled away his pay check, backed his train into an excursion train. The speaker denied that railroads overwork their men by deliberate choice and said it would be decidedly false economy for them to do so.

"Sometimes drink is mistaken for brain fag and overwork," said he. "The public has a right to demand from railway systems that employees be given sufficient rest, but that does not go

far enough. The employees should take rest during the time allotted to them, but when they do not, what then? The employee who uses his recreation for gambling, drinking and smoking to excess is no more fit for work than is the man who has been on duty sixteen or twenty hours."

A SENTENCE to a term of imprisonment for "substitution" in a drug store may seem to some to be harsh, (*New York Tribune*), but it must be remembered that the offence is in any case swindling and is also potentially one of the gravest that can be committed. In the case now in point the culprit refilled with ordinary water bottles which had contained water from a special spring. Perhaps no harm was done to life or health. But the purchaser of the refilled bottles was cheated, for he did not get that which he ordered and for which he paid, and the proprietor of the original contents of the bottles was injured, for the sale of the spurious stuff militated against the good repute of the genuine. For such an offence a man deserves severe punishment. But it must be remembered that the practice of substitution, if carried further, as it has been in not a few cases, might involve such vitiation of important prescriptions as would in the gravest manner affect the health and even the life of a patient. For such an offence three months in jail is really a light punishment. If the disposition of the present case, which has been before the courts for years, shall cause a general abandonment of a practice which has been by far too common a great gain for the public welfare will be attained.

PERSONAL.

DR. ROSWELL PARK will be tendered a dinner at the Hotel Iroquois, Buffalo, on the evening of December 7, 1908, in commemoration of his twenty-fifth anniversary as a teacher of surgery at the University of Buffalo. A number of distinguished surgeons from other cities have been invited and an unusually interesting occasion is anticipated. Drs. Charles G. Stockton, Charles Cary, Matthew D. Mann, Eugene A. Smith, and H. U. Williams constitute the committee in charge of the event.

DR. GEORGE F. COTT of Buffalo, who, with Mrs. Cott, spent some time abroad during the summer and autumn, has returned and resumed his professional practice at 1248 Main street.

DR. CHARLES A. L. REED of Cincinnati, has received the Order of Chevalier in the Legion of Honor of France. Dr. Reed studied in the hospitals of Paris, is accounted an able student of French, which he speaks fluently, and is president of the Cincinnati Alliance Francaise.

DR. CARLOS MACDONALD, of New York, announces his removal to 15 East Forty-Eighth street. Hours: Mondays, Wednesdays and Fridays, 11 to 1. Telephones: 306 38th street, 4254 38th street. Residence and sanitarium, Central Valley, N. Y. Telephone, long distance, No. 6.

DR. FREDERIC BRUSH, of Boston, has been appointed Superintendent of the New York Post-Graduate Medical School and Hospital. Before assuming the position he will devote some time to a study of post-graduate instruction and hospital administration in the various American medical centers.

DR. and MRS. D. C. EISENBERG returned recently after a four months' tour through Italy and Germany.

OBITUARY

DR. ASA W. JAYNE died at his residence in North Tonawanda, November 16, 1908, aged 51 years, after a year's illness. Dr. Jayne was born in Norwich, and had practised medicine at North Tonawanda for the last 21 years. He was graduated from Hamilton College and from the Hahnemann Medical College at Philadelphia. Dr. Jayne was coroner of the first Niagara district, having been appointed by Governor Flower to succeed Dr. C. C. Smith, resigned. Besides a widow, two sons, Dr. Luther Jayne of La Salle and Arthur L. Jayne of N. Tonawanda, survive.

DR. ROBERT W. GREEN, of Geneseo, N. Y., died at his home October 5, 1908, of angina pectoris, aged 64 years. He was a member of the Medical Society of the State of New York, a Civil War Veteran, a former health officer of his village, also trustee of Geneseo, county physician, and member of the board of education. He graduated from the Medical Department, University of Buffalo in 1889.

DR. ADDISON W. SCOTT, of Syracuse, N. Y., died at the home of his daughter at Germantown, Philadelphia, October 24, 1908.

from cancer of the stomach and liver, aged 57 years. He graduated at the Medical Department, University of Buffalo, 1890.

DR. ALONZO PETTIT, of Elizabeth, N. J., died at his home, November 14, 1908, from disease of the heart, aged 66 years. He helped to organise the Elizabeth General Hospital and served as a member of the consulting staff for many years. He graduated at the University of Buffalo in 1867.

DR. WALTER ROBARTS GILLETTE, of New York, died at the Roosevelt Hospital, November 7, 1908, after an operation for cancer of the intestines, aged 68 years. He was a member of the New York Academy of Medicine, of the Medical Society of the State of New York, a former vice-president of the Mutual Life Insurance Company, and an assistant surgeon in the volunteer army during the Civil War.

DR. HENRY DENTON NICOLL, of New York, died at his home at New Windsor, October 27, 1908, aged 64 years. He was one of the surgeons of the Woman's Hospital, consulting surgeon to various hospitals, and president of the law and order union of the State of New York.

SOCIETY MEETINGS.

THE New York and New England Association of Railway Surgeons held its eighteenth annual meeting at New York, November 17, 1908, under the presidency of Dr. F. A. Stillings. In his annual address, Dr. Stillings advised medical men connected with railways not to ride on passes given in payment for their services. He said surgeons should avoid contract service with railways unless they received enough salary to devote all their time to the work.

Officers were elected as follows: president, Dr. J. M. Wainwright, Scranton, Pa.; vice-presidents, Dr. C. A. Pease, Burlington, Vt., and Dr. G. C. Madill, Ogdensburg; corresponding secretary, Dr. George Chaffee, Brooklyn; recording secretary, Dr. C. B. Herrick, Troy; treasurer, Dr. J. K. Stockwell, Oswego.

THE Medical Association of Central New York met Tuesday, October 27, 1908, in the Buffalo Historical Society building,

under the presidency of Dr. Carlton C. Frederick, of Buffalo. The president's address, dealing with the topic of anesthesia is published elsewhere in this issue. Other papers will appear in due course. Officers were elected as follows: president, R. H. Conway, Auburn; first vice-president, F. H. Stevenson, Syracuse; second vice-president, E. W. Mulligan, Rochester; secretary, C. A. Greenleaf, Hornell (reelected); treasurer, C. O. Boswell, Rochester. The next meeting will be held in October, 1909, at Auburn.

THE Buffalo Academy of Medicine held meetings during November as follows:

Section of Surgery.—The regular meeting of this section was held Monday evening, November 2, 1908 at 8.30. Program: (1) "The diagnosis of extrauterine pregnancy, and the report of a case of primary ovarian pregnancy." James A. McLeod; (2) Demonstration on throat surgery, Geo. F. Cott; (3) Microscopical demonstration of opsonic indices, Norman K. McLeod; (4) Microscopical demonstration of decidual cells in extrauterine pregnancy, Charles A. Bentz.

Section of Medicine.—The regular meeting of this section was held Tuesday evening, November 10, 1908, at 8.30. Program: (1) The post-operative prognosis of spinal cord tumors, William C. Krauss.

Section of Pathology.—The regular meeting of this section was held Tuesday evening, November 17, 1908, at 8.30. Program: (1) Darier's disease ending in multiple skin cancer, Grover W. Wende, Dr. Wende exhibited specimens and presented the patients. (2) Cancer and sarcoma. A series of experiments made for the purpose of determining the origin and cause of cancer and sarcoma, their methods of propagation, means of prevention and also a few remarks upon their cure, H. D. Walker, Newburg, N. Y.

Section of Obstetrics and Gynecology.—A special stated meeting of this section was held Tuesday evening, November 24, 1908, at 8.30. Program: The choice of operation for uterine and bladder displacement and prolapse, Isaac S. Stone, Washington, D. C. Discussion opened by C. C. Frederick.

The Buffalo Academy of Medicine was incorporated November 10, 1908. This meeting was called to adopt Constitution and

By-Laws, and to hear a supplementary report of the Contagious Hospital Commission.

THE Rochester Academy of Medicine held regular monthly meetings at Hotel Seneca as follows:

Wednesday evening, November 11.—Candidate for resident fellowship, Irving L. Walker. Program: Some recent aspects of the cancer problem, Roswell Park, of Buffalo.

Wednesday evening, November 18. Program: The dead man's curve, Thomas Jameson.

Wednesday evening, November 25. Program: The prevention of ophthalmia neonatorum. Illustrated by lantern. F. Park Lewis of Buffalo.

Friday evening, December 4. Program: The Comparative values of the tuberculin tests, with special consideration of the ophthalmic, Henry L. Elsner, Syracuse.

COLLEGE AND HOSPITAL NOTES

THE Hospital for Contagious Diseases has made a start in the action by the board of aldermen, in passing a resolution asking for a \$250,000 enabling act. This first step may be a long way from the conclusion of the effort, but it is at least a beginning. Let the work go on.

DR. GEORGE DOCK of the Medical Department, Tulane University, is delivering a course of special lectures which began October 28, 1908. The remainder of the schedule includes:

December 16, VII.—Exophthalmic Goitre (Concluded): Complications; varieties; prognosis; diagnosis; treatment. Athyreosis and Hypothyreosis: (Cretinism and myxedema): Historical; endemic; etiology; pathology and pathologic anatomy; clinical features; treatment.

January 6, VIII.—Sporadic Cretinism: Etiology; clinical features; prognosis; diagnosis; treatment. Myxedema: Etiology pathologic anatomy; symptoms; varieties; diagnosis; course and prognosis; treatment.

January 13, IX.—The Pituitary Body: Physiology; pathologic anatomy. Acromegaly: Historical; etiology; morbid anatomy; clinical features; prognosis; diagnosis; treatment. Progeria.

January 20, X.—Osteomalacia. Historical; etiology; morbid anatomy; clinical course; diagnosis; prophylaxis; treatment.

BOOKS AND AUTHORS.

The Muscles of the Eye. By **Lucien Howe**, M.A., M.D., Professor of Ophthalmology, University of Buffalo. In two vols. Vol. 2. Pathology and treatment. Illustrated. pp. 481, 8vo. G. P. Putnam's Sons. New York and London. 1908. (Cloth, \$4.50).

The completion of the elaborate work of Dr. Howe on "The Muscles of the Eye," the first volume of which was reviewed in the JOURNAL in April, 1907, is an achievement which should arouse the fraternal pride of every physician who is directly or indirectly interested in ophthalmology. This volume embodies an extended study of pathology and treatment of affections of the ocular muscles, which is pursued with the same care, thoroughness and system as were shown in the first volume. Nothing of importance to the ophthalmic practitioner seems to have been omitted, and by reason of diagnostic and therapeutic bearings involved, the work has an absorbing interest, even exceeding that of the preceding volume.

Within the space at our command, it is impossible to review this work as fully as it merits. But the following outline will indicate to the reader somewhat of its scope and scientific character. It is divided into five parts, and each of these is further divided into chapters, divisions and subdivisions. Supplementing these parts there are three appendices.

Part I deals with *ocular muscle imbalance* in all of its forms as manifested in the intraocular muscles alone (accommodation), the extraocular muscles alone (heterophoria, including torsion) and in both the intra- and extraocular muscles as related to one another. The description, effects, diagnosis and treatment of the numerous varieties are presented in a most complete and practical manner, the subject occupying nearly one-half of the book, aside from the appendices. Part II embodies an extended study of "*deviations due to lesions in the extraocular muscles or in the globe (strabismus)*" and gives their definition, symptoms, diagnosis, etiology, pathology and treatment. Part III in the same manner discusses the "*deviations due to lesions in the brain or nerves (the paralyses)*." In part IV, "*atypical movements—inflammations and injuries of the muscles*" are dealt with, and in part V, the "*operations on the muscles*" are described in their whole range and variety.

In reading these pages one is deeply impressed by the amount of painstaking labor which the author has bestowed. Although he has presented many original suggestions, devices and methods, yet he has had no hobbies to ride, and has broadly and with the greatest fairness recorded the views and experiences of others, giving specific references in the text to the authorities from which he has drawn his information. The numerous illustrations are

appropriate and well-executed and the literary and scientific character of the work is of high quality.

In addition to the text, proper, there are three appendices. Appendix A contains a very complete bibliography of the subjects treated, and not only indicates the laborious research and erudition of the author, but is an invaluable aid to those who may desire to pursue this theme further and refer to original authorities. The bibliographic references in this volume include numbers 825 to 2,000, grouped under headings corresponding to the various divisions of the text. The bibliography concludes with an index to the authors referred to, as is done in the first volume. Appendix B contains a continuation from the first volume of a list of questions on subjects that are suggested for further investigation. Appendix C tabulates the ophthalmological journals which may be found in certain English libraries.

The volume ends with a carefully prepared index, and portraits and sketches of a few of the ophthalmologists who have made important contributions to ocular myology.

From this outline, although much restricted, the reader may realise the amount of labor which this as well as the first volume has entailed, and the wealth of material which has here been brought together. The author is to be congratulated on the consummation of such a difficult task in such a praise-worthy manner, and the profession should cordially welcome the publication of a work having the scientific and practical value of this one.

A. A. H.

A Treatise on the Principles and Practice of Gynecology. By E. C. Dudley, A.M., M.D., Professor of Gynecology in the Northwestern University Medical School, Chicago. Fifth edition, thoroughly revised. Octavo, 806 pages, with 431 illustrations, of which 75 are in colors, and 20 full-page colored plates. (Cloth, \$5.00 net; leather, \$6.00 net; half-morocco, \$6.50.) Lea & Febiger, Publishers, Philadelphia and New York, 1908.

Dudley's gynecology is too well-known to the medical profession to require a formal introduction at this time at our hands. It has met the approval of teachers, practitioners and students in the four preceding editions and, we cannot doubt, will receive even a warmer approbation in the fifth edition now issued. The general plan of the volume is the same as before, but a number of chapters have been changed to meet advances made of late. Two new chapters appear, one an introduction that comprises a portion of the author's presidential address before the American Gynecological Society at Niagara Falls, May, 1905; and the other, the final chapter, in incontinence of urine in women, also dealt with in that address. We made extended editorial comment on this address in the July, 1905, edition of the JOURNAL, to which we invite the attention of our readers.

The illustrations are made from special drawings, all original work, and are particularly valuable to the practitioner. We are unacquainted with any similar treatise in which the illustrations are so profuse or so useful from the viewpoint of instruction. Dudley's gynecology will retain its place in the forefront among treatises on the diseases of women.

Progressive Medicine, Vol. No. 3, September, 1908. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by **Hobart Amory Hare, M.D.**, Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, 285 pages, with 30 engravings. Lea & Febiger, Publishers, Philadelphia and New York. (Per annum, in four cloth-bound volumes, \$9.00; in paper binding, \$6.00, carriage paid to any address.)

This number contains abstracts of medical progress under four general heads. Ewart, in the department of diseases of the thorax and its viscera, presents an excellent summary of recent literature pertaining to tuberculosis; also in regard to emphysema, as well as disturbances that arise in disorders of the heart, in blood pressure, in diseases of the lungs, and of the bloodvessels. Gottheil deals with dermatology and syphilis in splendid fashion, while Davis presents an unusually interesting synopsis of obstetric literature.

The branch relating to the nervous system is presented by William G. Spiller, covering everything of importance that has appeared relating to that topic.

Progressive medicine occupies a field apart from that of the magazine. It performs for the general practitioner, the surgeon and the specialist a most important service, bringing him knowledge which he could not otherwise obtain, either by his own efforts or in any other publication.

Adenomyoma of the Uterus. By **Thomas Stephen Cullen, M.D.**, associate professor of gynecology in the Johns Hopkins University. Royal 8vo, pp. 270. Illustrated. Philadelphia and London: W. B. Saunders Co. (Cloth, \$5.00.)

Whoever examines this work with care cannot fail to be impressed by several remarkable features that are developed in its pages. It is based on a study of about one hundred cases of adenomyoma which the author has encountered. This compound form of growth is less common than has been believed. Cullen informs us in this book that of 1,283 cases of myoma examined between April 1, 1893, and July 1, 1896, 5.7 per cent. were examples of adenomyoma. From his summary we extract data of importance.

He divides adenomyomata into three groups: (1) adenomyomata in which the uterus preserves a relatively normal contour; (2) subperitoneal or intraligamentary adenomyomata; (3) submucous adenomyomata. Lengthened menstrual periods, he says, are the first symptoms, the flow gradually assuming the proportions of hemorrhages. The pathology of this condition is dealt with in a thorough manner.

Cullen thinks the diagnosis clinically should not be difficult, especially of diffuse adenomyoma. His reasons are, (1) the bleeding is usually confined to the period; (2) there is usually much pain, referred to the uterus, at the period; (3) there is usually no intermenstrual discharge of any kind; (4) the uterine mucosa is perfectly normal and may be rather thick. No other pathological condition of the uterus, he affirms, as a rule, gives this clinical picture.

As to treatment, the only rational treatment is to remove the uterus. The patient's health, generally speaking, is being undermined by the hemorrhages and these can be controlled only by this procedure, a supravaginal hysterectomy without removal of the ovaries being advised. The entire book is full of interest and possesses great scientific value. It is handsomely printed in large type on heavy calendered paper. The engravings are superb specimens of art work,—author, artists and publishers having together made a most beautiful and instructive volume.

Textbook of Operative Surgery, covering the surgical anatomy and operative technic involved in the operations of general surgery designed for practitioners and students, by **Warren Stone Bickham, M.D., Phar.M.**, junior surgeon to Touro Hospital, New Orleans. Third edition. 854 illustrations, pp. 1,206. W. B. Saunders Company, Philadelphia and London. 1908. (Price, cloth, \$6.50 net.)

It has remained for Bickham to become one of the most famous of the younger authors on surgery. He has been fortunate, singularly so, in presenting the right kind of a surgical treatise and, also, in presenting it in the right way. The first edition, which appeared in 1903, received extended notice in the issue of the *JOURNAL* for January, 1904. At that time, among other things, we said the book was a distinct addition to the literature of surgery, and we may now add that it belongs to the permanent class of that literature.

In this edition, as in those preceding it, the latest operations are given with clearness and the best technic for their execution is described. We may cite Bickham's chapters on brain surgery and on the pancreas as instances of excellent detail and as examples of the very best modern scientific surgical instruction. The book abounds with evidence of thoughtful, studious work, is arranged in a manner that appeals to both student and practi-

ing surgeon, and will prove of great value to him who must perforce practice surgery as well as medicine, and for which he must equip himself with literature which meets his necessities. Moreover, it will be needed by every teacher and instructor in surgery of whatever grade.

The changes in this edition are many. Twenty-nine pages have been omitted while one hundred and twenty-three have been added. Forty-two pictures have been omitted and forty-five have been redrawn, while three hundred and thirty-one have been added. The last edition contained nine hundred and eighty-four pages and five hundred and fifty-nine illustrations; there are in this one thousand and four pages and eight hundred and fifty-four illustrations. Bickham has made the best, far and away the best, operative surgery in the American language.

The Practitioners' Visiting List for 1909. An invaluable pocket-sized book containing memoranda and data important for every physician, and ruled blanks for recording every detail of practice. The Weekly, Monthly and 30-Patient Perpetual contain 32 pages of data and 160 pages of classified blanks. The 60-Patient Perpetual consists of 256 pages of blanks alone. Each in one wallet-shaped book, bound in flexible leather, with flap and pocket, pencil and rubber, and calendar for two years. Price by mail, postpaid, to any address, \$1.25. Thumb-letter index, 25 cents extra. Descriptive circular showing the several styles sent on request. Lea & Febiger, Publishers, Philadelphia and New York.

This handsome pocketbook designed for the professional use of physicians comes to our table with all its old features of value and some new ones, making it, by and large, one of the most useful articles of the active practitioner's outfit. The description given in the heading is sufficiently ample to apprise the intending purchaser of its scope, but there are many memoranda relating to emergencies, as well as ordinary bedside practice that possess great practical utility. These relate to the examination of urine, incompatibles, treatment of asphyxia, dosage, ligation of arteries, and therapeutic hints of various kinds. It is not easy nowadays to get along without a book of this sort.

Textbook of Nervous Diseases and Psychiatry for the use of students and practitioners of medicine, by **Charles L. Dana, A.M., M.D., LL.D.**, professor of nervous diseases in Cornell University; neurologist to the Montefiore Hospital; neurologist to the Woman's Hospital, etc. Seventh edition. Two hundred and sixty-one engravings; three plates in black and colors, pp. 782. New York: William Wood & Company. 1908. (Price, cloth \$5.00 net.)

The several preceding editions of this admirable work have received extended notice in these columns. In this one will be found many additions, as well as adequate general revision, making it stand abreast of the science of neurology at the present day.

The finer anatomy of the nervous system, the histology of the neuron, together with the anatomy and physiology of the brain are all suitably presented. The additions in some instances have rendered the rewriting of a number of chapters necessary, while many illustrations have been added to the text. Dana is a recognised master in his chosen field and has given to the profession a book that is at once the favorite of the specialist and the student of neurology.

A Manual of Diseases of the Nose and Throat. By **Cornelius G. Coakley**, M.D., Clinical Professor of Laryngology in the University and Bellevue Hospital Medical College, New York. New (4th) edition, 12mo, 604 pages, with 126 engravings and 7 colored plates. Lea & Febiger, Philadelphia and New York, 1908. (Cloth, \$2.75 net.)

We have had occasion previously to write in these columns of the quality of this manual, of its excellence we may add. It deals with almost the greatest specialty; at all events with diseases affecting the comfort, and welfare of the largest number of people. Coakley is a man of great experience and positive convictions, expressing them with emphasis and clearness. As an example of the author's teachings, for he is a clinician as well as a writer and teacher, we may point to his dissertation on the antra, —the sinuses—and their diseases, as fully sustaining our statements or comment at our hands. This edition has been revised with care, embracing every improvement of value and every method of practical worth. The chapter on therapeutics will be read with interest. Coakley is strong on examination, diagnosis, and treatment.

Consumption: How to Prevent it and How to Live With It. By **N. S. Davis**, A.M., M.D., Professor of Principles and Practice of Medicine, Northwestern University Medical School, Chicago. Second edition. 12mo. 172 pages. F. A. Davis Company, Publishers, Philadelphia. (Cloth, \$1.00.)

The interest in the disease dealt with in this monograph has increased of late to such a degree, that the laity is almost as intelligent in reference to many phases of prevention as the average physician. This book was recognised at once when it first appeared in 1891, as a helpful guide for the patient and as being full of useful hints to the physician. It has now been revised to include most valuable information for everyone interested in a disease that has come now within the range of prevention and cure. The ravages of the malady have heretofore appalled those who have made a study of the subject. Thanks to such efforts as this author has put forth, we are now coming to see the light on a disease whose terrors have been reduced many fold.

Pain. Its Causation and Diagnostic Significance in Internal Diseases. By **Dr. Rudolph Schmidt**, Assistant in the Clinic of Hofrat von Neusser, Vienna. Translated by **Karl M. Vogel** and **Hans Kinsler**, College of Physicians and Surgeons, New York. 12mo, pp. 326. Philadelphia and London: J. B. Lippincott Co. (Cloth, \$3.00).

Not since the appearance of Mr. Hilt n's monograph on Rest and Pain, now some thirty years ago, has such a complete analysis of the symptomatology of pain been presented to the profession as we find in Dr. Schmidt's treatise. It is quite often difficult to read aright the significance of pain and to assign to it a proper place as a sign of disease; indeed, it often masks the real, the true diagnostic evidences, and thus may become misleading. Therefore, it becomes necessary to study it alone, apart from other manifestations of disease, as well as in conjunction with them. This author points the way to do this, the way to "correct analyses and logical deductions." Pain is the all-important symptom to the patient, and the first duty of the physician often is to relieve the distress, the suffering, before he can form a correct opinion as to the malady. In this book will be found a guide to the solution of a difficult problem, and we doubt not every clinician will welcome it to his library.

Refraction of the Eye, by **Harry C. Parker**, M.D., Clinical Professor of Ophthalmology, Indiana University School of Medicine, Indianapolis. With 106 illustrations. Philadelphia and London: W. B. Saunders Company. 1908. (Price, \$1.25 net.)

The importance of proper refraction can scarcely be overestimated. The student, in particular, should be instructed with care on this subject that he may never afterward deal lightly with eyes needing correction lenses. Too often such conditions are given over to persons inadequately instructed in the principles of optics, much to the discomfiture of the sufferers. Parker in this monograph deals with the topic seriously, and, withal, scientifically and his book, in our opinion, should find itself in the hands of every junior ophthalmologist.

The Cure of Rupture by Paraffin Injections by **Charles C. Miller**, M.D. Small 12 mo, pp. 81. Published by the Author, 70 State St., Chicago. (Prepaid \$1.00.)

This essay may with propriety be entitled "Hernia cured while you wait." The author seems to regard the injection of paraffin as an efficient means of curing hernia, as being perfectly safe, and as feasible for employment in the physician's office. All things appear possible in these days of rapidity of movement, but we are inclined to adhere to the old fashioned knife as the most reliable cure for this affliction. However, it will do no harm to read this primer and we commend the author as having the courage of his convictions.

Reference Handbook for Nurses by **Amanda K. Beck**, Graduate of the Illinois Training School for Nurses. Second edition. Revised. Philadelphia and London. W. B. Saunders Company. 1908. (Price, \$1.25 net.)

Nurses need just such a book as this,—one prepared by a practical nurse, containing practical material. There is nothing in this manual that every nurse will not need sometime in her career, and when she does need it she will want it badly; hence she had better get the book now. It is of such convenient size as to find an appropriate place in the handbag, therefore can always be at hand,—a point in its favor of no mean importance. A few useful illustrations have been added to this edition, thus making the book about as complete as can be without materially increasing its size, which would be a mistake in our view.

Manual of Clinical Diagnosis by **James Campbell Todd**, Ph.B., M.D., associate professor of pathology in Denver and Gross College of Medicine, University of Denver, etc. Illustrated. W. B. Saunders Company, Philadelphia and London. 1908. (Price, \$2.00 net.)

The title of this book should read "Laboratory Methods of Clinical Diagnosis." It would then not be misleading, as it deals only with those methods. The usual bedside methods are not detailed in this book. We must not be understood as offering this criticism in derogation of the material contained in the pages of this manual. On the other hand, we regard the entire text as most valuable. The author is painstaking, scientific, correct; his book is full of instructive matter, and is to be commended to every student who would perfect himself in the art of diagnosis, who would make a name for himself as a diagnostician. The beauty of the volume is striking; its make-up appeals to the lover of handsome books.

The Ready-Reference Handbook of Diseases of the Skin. By **George Thomas Jackson**, M.D., Chief of Clinic and Instructor in Dermatology, College of Physicians and Surgeons, New York. Sixth edition. 12 mo, 737 pages, with 99 engravings and 4 plates, in colors, and monochrome. Lea & Febiger, Publishers, Philadelphia and New York, 1908. (Cloth, \$3.00, net.)

The profession, both general and special, the dermatologist and general practitioner, one and all are so familiar with this handbook, that little need,—indeed, little new can be said about it at the present time. It is almost a classic in the literature of dermatology, standing alone as to its value and importance among the handbooks in this specialty. This edition has been thoroughly revised, the literature of dermatology studiously examined and every important point incorporated in the text, so it may be stated as a general proposition that no dermatological work of its class could be more complete. The new articles added will increase interest in the book. They are upon black tongue, dermatitis verrucosa, keratosis follicularis contagiosa, keratosis

senilis, lichen obtusus, melung, pseudopelade, and sporotrichosis hypodermica. The pathology in the book has been revised and added to—making the work as nearly complete as may be.

Pulsating Exophthalmos. By **George E. de Schweinitz**, M.D., Professor of Ophthalmology in the University of Pennsylvania, and **Thomas B. Holloway**, M.D., Instructor in Ophthalmology. Small octavo, p. 124. Philadelphia and London: W. B. Saunders Co. (Cloth, \$2.00).

The subject of this monograph has not before been separately dealt with, as far as we are informed. The affection is not met with frequently, hence, this brochure will be welcomed by every ophthalmologist. From 1805 to July, 1907, 313 cases of pulsating exophthalmos have been recorded. These authors have analysed sixty-nine cases in addition to those referred to, the object being to determine, if possible, those surgical procedures likely to prove of greatest value in controlling the symptoms of this disease. The cases are tabulated at the end of the book and so made available for immediate reference. It is of the higher class medical literature.

Cataract Extraction. A Series of Papers with discussions read before the Ophthalmological Section of the New York Academy of Medicine, 1907-1908. Edited by **J. Herbert Claiborne**, M.D., Instructor in Ophthalmology, Cornell University Medical College. Small octavo, pp. 169. New York: William Wood & Co. (Cloth, \$2.00.)

This group of essays on the important subject of cataract extraction will prove of interest to every ophthalmologist. They are written not only by capable men but have been attractively edited and printed and will serve to adorn the library, as they could not if allowed to be buried in the journalistic chaos of the attic. Dr. Claiborne deserves the thanks of his colleagues for the part he has performed so well.

International Clinics. A Quarterly of Illustrated Clinical Lectures and especially prepared articles on Treatment, Medicine, Surgery, Neurology, Pediatrics, Obstetrics, Gynecology, Orthopedics, Pathology, Dermatology, Ophthalmology, Otology, Rhinology, Laryngology, Hygiene and other topics of interest to students and practitioners. Edited by **W. T. Longcope**, M.D., Volume II., eighteenth series. Philadelphia and London: J. B. Lippincott Co. 1908. (Cloth, \$2.00.)

This volume contains twenty-four articles, distributed among the various branches of medicine as follows: five on treatment; five on medicine; four on surgery; three on gynecology; two on ophthalmology; one on dermatology; one on orthopedics; one on pediatrics; and two on pathology. Of the more notable contributions may be mentioned that of Louis Fischer on the treatment of scarlet fever, that of Behan on the changes in the outlines of the heart, etc., that by John G. Cecil on valvular disease

of the heart, that by Cumston on perinephritic abscess in children, that by Sampson on the clinical manifestations of uterine cancer, that by Louis Frank on pregnancy complicated by uterine fibromata in a hemiplegic, and that by Simon on recent research into the pathology of malignant disease. All the articles, however, are of sufficient merit to justify the statement that this number is one of unusual value. It is well illustrated by a large number of figures and plates that add very much to the quality of the volume.

The Principles and Practice of Hydrotherapy. By Simon Baruch, M.D., professor of hydrotherapy in Columbia University (College of Physicians and Surgeons) New York. Third edition. Octavo, pp. 544. Illustrated. New York: William Wood & Co. (Cloth, \$4.00.)

Every experienced physician knows full well that water is a valuable therapeutic aid in the treatment of disease,—some diseases; every competent physician is equally well aware that water is not a cure-all,—that alone it is not adequate in many diseases. And yet it is quite possible if one should be limited, by some mischance, to one remedy, water would fill the largest therapeutic place.

To one unfamiliar with the various uses of water in medicine this book will supply the needed information. It is written on a scientific plane though, perchance, somewhat enthusiastically; yet this scarcely detracts from its merit as a therapeutic guide. This edition is constructed on the same general lines as its predecessors, some new material being added to make it conform to the author's further experience. It is the best exponent of hydrotherapy at the present time.

The Physician's Visiting List (Lindsay & Blakiston's) for 1909. Fifty-eighth year, with dose table revised in accordance with U. S. Pharmacopeia, 1905. Philadelphia: P. Blakiston's Son & Company, 1012 Walnut Street.

Blakiston's visiting list for physicians for the year 1909, is in the field with promptitude. This is the fifty-eighth year of its publication, with all its old valuable features retained and such new ones added as are necessary to keep it abreast of existing requirements. It contains among other things calendars for 1909, and 1910; a table for calculating the period of gestation; a dissertation on incompatibility; the treatment of poisoning; metric system of weights and measures; table converting apothecaries weights and measures into grams; dose table, both English and metric systems; asphyxia and apnea treatment; comparison of thermometers; these, beside the weekly pages for recording professional work, cash account, obstetric and vaccination engagements and space for other valuable material. It is compact, ample for all purposes, and is published in three forms,—regular edition, perpetual edition, and monthly edition.

The Natural History of Cancer, with special reference to its Causation and Prevention. By **W. Roger Williams**, Fellow of the Royal College of Surgeons. Octavo, pp. 519. Illustrated. New York: William Wood & Co. 1908. (Cloth, \$5.00.)

The literature of cancer is now extensive and constantly increasing in volume if not in quality. It is a disease that is attracting the attention of those students who would ascertain its cause, and is being investigated from all viewpoints, some seeking to prove its parasitic origin, while others are content to establish its starting point if possible, without regard to theoretic cause. Williams presents facts that he has adduced in the study of the natural history of the disease, massed with great care, and which cannot fail to aid in the further study of cancer from any and all viewpoints.

Many of his statements are surprising if not startling. This author, for example, says he has never found cancer among prostitutes, and that persons of drunken or dissolute habits are seldom afflicted with the disease. He gives statistics bearing on the topographical frequency of cancer that are interesting if not instructive. Williams is a logical observer and does not rush into print with a theory to establish; but, on the other hand, groups his facts with care and presents them duly analysed for the inspection of those interested. His book represents enormous labor and helps to bring light into a dark field. We doubt not it will prove of invaluable aid in the solution of the most difficult problem undertaken by modern investigators.

Subcutaneous Hydrocarbon Protheses. By **F. Strange Kolle**, M.D., Author of the "Recent Roentgen Discovery," etc. 12 mo, pp. 153. New York: The Grafton Press. (Cloth, \$2.50.)

Under another name this author describes the method of subcutaneous injection of paraffin for correction of facial deformities. The subject is presented with skill and whatever of value there may be in the method is set forth attractively. The printing is superb and the little brochure will prove an addition to the library of the rhinologist who may wish to preserve all the novelties of his art. We may add that this is the best brochure on this topic we have yet seen.

Insomnia and Nerve Strain. By **Henry S. Upson**, M.D., professor of diseases of the nervous system in the Western Reserve University, Cleveland, O. 12 mo, pp. 142. Illustrated. New York and London: G. P. Putnam's Sons. 1908.

This essay affords most interesting reading to those who would delve into the mysterious realm of mental hebetude, of the psychoses that cause unrest, even, in some instances, actual insanity. Insomnia is generally due to physical fault or faults, and this writer tells of this fact and how to correct such conditions, thus bringing about relief. All mental aberrations attract attention because of pity or fear, and create apprehension in the

minds of relatives or friends. To interpret the symptoms aright may not be easy to the inexperienced, but this monograph furnishes a helpful guide to a solution of many conditions otherwise obscure or unfathomable. It is quite as important for the general practitioner to possess it as that the specialist should place it among his choice collection. It will prove useful to both the alienist and the family doctor.

BOOKS RECEIVED.

Diseases and Surgery of the Genitourinary System. By Francis S. Watson, M.D., Senior Visiting Surgeon to the Boston City Hospital, Lecturer on Genitourinary Surgery in the Harvard Medical School, Boston, and John H. Cunningham, Jr., M.D., Assistant Visiting Surgeon to the Boston City Hospital. In two octavo volumes containing 1,101 pages, with 454 engravings and 47 full-page colored plates, mostly from original drawings. Lea & Febiger, Publishers, Philadelphia and New York, 1908. (Price for the complete work: Extra cloth, \$12.00, net; half persian morocco, gilt tops, le luxe, \$17.00, net.)

International Clinics. A Quarterly of Illustrated Clinical Lectures and especially prepared articles on Treatment, Medicine, Surgery, Neurology, Pediatrics, Obstetrics, Gynecology, Orthopedics, Pathology, Dermatology, Ophthalmology, Otology, Rhinology, Laryngology, Hygiene and other topics of interest to students and practitioners. Edited by W. T. Longcope, M.D., Volume II, eighteenth series. Philadelphia and London: J. B. Lippincott Co. 1908. (Cloth, \$2.00.)

Applied Surgical Anatomy, Regionally Presented. By George Woolsey, A.B., M.D., Professor of Anatomy and Clinical Surgery in Cornell University Medical College, New York. Second edition. Octavo volume of 601 pages, with 200 illustrations in black and colors. Lea & Febiger, Philadelphia and New York, 1908. (Cloth, \$4.50, net.)

Surgery: Its Principles and Practice. In five volumes. By 66 eminent surgeons. Edited by W. W. Keen, M.D., LL.D., Hon. F.R.C.S., Eng. and Edin., Emeritus Professor of the Principles of Surgery and of Clinical Surgery, Jefferson Medical College, Phila. Volume IV. Octavo of 1194 pages, with 560 text-illustrations and 22 colored plates. Philadelphia and London: W. B. Saunders Company, 1908. (Per volume: cloth, \$7.00 net; half morocco, \$8.00 net.)

Medical Directory of New York, New Jersey and Connecticut. Published by the Medical Society of the State of New York. Vol. X. 1908.

Transactions of the sixth annual conference of state and territorial health officers with the United States public health and marine hospital service, held at Washington, D. C., April 27, 1908.

Anatomy. By Dr. Carl Nicoladoni, Graz. Illustrated. Berlin: Urban & Schwargenberg.

Therapeutics of the Circulation. Eight lectures delivered in the spring of 1905, at the University of London. By Lauder Brunton, Consulting Physician to St. Bartholomew's Hospital. Small 8vo. pp, 280. Illustrated. Philadelphia: P. Blakiston's Son & Co. (\$1.50.)

Surgical Memoirs and Other Essays. By James G. Mumford, M.D., Instructor in Surgery, Harvard Medical School. 12 mo, pp. 358. Illustrated. New York: Moffat, Yard & Co. (Cloth, \$2.50.)

Russell Sage Foundation. Medical Inspection of Schools. By Luther Halsey Gulick, M.D., Director of Physical Training, New York Public Schools, and Leonard P. Ayres, General Superintendent of Schools of Porto Rico, 1906, 1908. New York Charities Publication Committee. (Cloth, \$1.00.)

Transactions of the Section on Obstetrics and Diseases of Women of the American Medical Association at the 59th annual session held at Chicago, June 2, 5, 1908.

Principles and Practice of Physical Diagnosis. By John C. DaCosta, Jr., Assistant in Clinical Medicine in Jefferson Medical College, Philadelphia. Octavo, pp. 548. Illustrated. Philadelphia and London: W. B. Saunders Co. (Cloth, \$3.50.)

General Pathology. By Dr. Ernst Ziegler, Breisgau. Eleventh revised German edition. Edited by Aldred Scott Warthin, M.D., Ann Arbor. Octavo, pp. 801. Illustrated. New York: William Wood & Co. (Cloth, \$5.50.)

The Surgery of the Ear. By Samuel J. Kopetzky, M.D., Attending Otolologist, New York City Children's Hospitals and Schools. Octavo, pp. 385. Illustrated. New York: Rebman Co. (Cloth, \$4.00.)

A Handbook of Suggestive Therapeutics, Applied Hypnotism, Psychic Science. By Henry S. Munro, M.D., Americus, Ga. 12 mo, pp. 360. Second edition. St. Louis: C. V. Mosby Co. (Cloth, \$3.00.)

Practical Points in Anesthesia. By Frederick-Emil Neef, New York. Small 12 mo, pp. 51. New York: Surgery Publishing Co.

Arteriosclerosis. By Louis M. Warfield, M.D., Instructor in Medicine in Washington University Medical Department. 12 mo, pp. 165. Illustrated. St. Louis: C. V. Mosby Co. (Cloth, \$2.00.)

Gonorrhea in Women. By Palmer Findley, M.D., Professor of Gynecology in the College of Medicine of the University of Nebraska, Omaha. pp. 112. St. Louis: C. V. Mosby Co. (Cloth, \$2.00.)

Proceedings of the American Medico-Psychological Association at the sixty-third annual meeting held at Washington, D. C., May 7, 10, 1907. C. W. Pilgrim, M.D., Secretary.

LITERARY NOTES.

AN English-Chinese lexicon of medical terms, prepared by Dr. Philip B. Cousland, has just been published in Shanghai. Though the author is an Englishman by birth, he has based his book largely upon the Medical Dictionary of Dr. George M. Gould, formerly of Philadelphia, now of Ithaca, which may be considered a compliment to American scholarship. Dr. Cousland has recently published a translation of Professor Halliburton's edition of Kirkes' Physiology.

WILLIAM WOOD & COMPANY, Publishers, New York, announce the publication of new books entitled: Common Affections of the Liver by W. Hale White, M.D., F.R.C.P. 12 mo, 310 pages. Price, muslin, \$2.00 net. The Bacteriology of the Eye by Dr.

Theodor Axenfeld, Professor of Ophthalmology in the University of Freiburg. Translated by Angus Macnab, B.A., B.Sc., M.B., Ch.B., F. R. C. S. Price, \$6.00 net. The Ophthalmic and Cutaneous Diagnosis of Tuberculosis, together with a Discussion of the Clinical Methods for the Early Diagnosis of Pulmonary Tuberculosis by Dr. Alfred Wolff-Eisner. A Preface by Professor H. Sevector and an Introductory Note to the English reader by C. Theodore Williams, M.D. (Translated from the German by Bernard I. Robert.) Octavo, 215 pages, illustrated by numerous diagrams and large folding charts and two chromo-lithographic plates. Price, extra muslin, \$2.75 net.

MISCELLANY.

THE Surgeon General of the Army announces that the first of the preliminary examinations for the appointment of first lieutenants in the Army Medical Corps for the year 1909, will be held on January 11, 1909, at points to be hereafter designated.

Full information concerning the examination can be procured upon application to the Surgeon General, U.S. Army, Washington, D.C. The essential requirements to securing an invitation are that the applicant shall be a citizen of the United States, shall be between twenty-two and thirty years of age, a graduate of a medical school legally authorized to confer the degree of doctor of medicine, shall be of good moral character and habits, and shall have had at least one year's hospital training or its equivalent in practice. The examinations will be held concurrently throughout the country at points where boards can be convened. Due consideration will be given to localities from which applications are received, in order to lessen the traveling expenses of applicants as much as possible.

The examination in subjects of general education (mathematics, geography, history, general literature, and Latin) may be omitted in the case of applicants holding diplomas from reputable literary or scientific colleges, normal schools or high schools, or graduates of medical schools which require an entrance examination satisfactory to the faculty of the Army Medical School.

In order to perfect all necessary arrangements for the examination, applications must be complete and in possession of The Adjutant General on or before December 10, 1908. Early attention is therefore enjoined upon all intending applicants. There are at present fifty-seven vacancies in the medical corps of the army.

BUFFALO MEDICAL JOURNAL.

VOL. LXIV.

JANUARY, 1909.

No. 6

ORIGINAL COMMUNICATIONS.

The Mineral Nutrients, Air, Water and the Salts.¹

By HENRY REED HOPKINS, M. D., Buffalo, N. Y.

Ninety-Seventh President of the Medical Society of the State of New York.

THE question of our daily bread is one of elemental importance, to the sick and to the well, in all classes and in all ages, for prevention and for cure. Its consideration may properly begin with a word of caution against the work of the optimist, the pessimist, the medical anarchist, and more than all others, because more numerous than all the rest, the over credulous, the brain weary, the pseudo-scientists, the *Quimby-Eddyites*. All of these are at once the enemy to be conquered, the heathen to be converted, the children to be won and protected, by sound teaching and right example upon our part.

In addition to its primary importance, the knowledge of dietetics is interesting from the fact that it is sought and used by all classes of doctors,—by physicians, by homeopaths, by eclectics, and by the osteopaths. The *Quimby-Eddyites* are the only medical cult of any considerable number that openly flaunt the importance of right ideas and practises in dietetics; on the other hand their predecessors and introducers, the homeopaths have won the most substantial of their confidence by strict attention to these matters. Furthermore, I think it is expedient at this time that we give this topic consideration for the reason that recent advances in physico-chemistry enable students to say in truth as never before that there is a science of dietetics, and the art of dietetics should ever be willing to receive with joy whatever of practical contributions science has to offer. And, finally, to conclude this introduction, the writer has something to say which he not only believes worthy of consideration and, moreover, for that something which he now offers he earnestly desires the characteristic scrutiny and criticism from the members present without favor, and without mutual admiration, to the end that only the fit shall survive.

1. Read before the Medical Club, March 18, 1908.

For many years I have been troubled with the growing conviction that the role of the inorganic nutrients in animal metabolism is not adequately appreciated, at least as indicated by the teachings, the writings and the practice coming under my observation. I do not know of a writer on hygiene or dietetics who states this matter plainly and comprehensively with any approach to suitable emphasis, and of this part of medical literature generally it may be said, that it is feeble, confusing, uncertain, inadequate incompetent. This criticism is competent only upon the assumption, the result of the best study and thought I have been able to give the matter, that the inorganic foods, the mineral nutrients, include air, water and the mineral salts found in the excretions and the bodies of animals. Also, the further assumption that when foods are classified and enumerated in the order of importance, the inorganic foods, the mineral nutrients, should stand in class one. That, as in the nutrition of plants the inorganic foods, the mineral nutrients are the foods and there are no others; even so in the metabolism of animals these same foods are far and away more essential and more important than any others; that in classification these should be placed first, and in description, these should be treated at length with the emphasis due their primary and singular importance. Perhaps it should be further observed here, that in thinking of classification of foods I am using the word in an inclusive and comprehensive sense, having in mind something of the relative importance of foods, of their intimate relation to life and to its manifestations, as sensation growth, and repair, rather than having in mind the more accidental appearances of foods, whether they are solid or fluid, bulky or concentrated, or the like. I am thinking of classification which is inclusive and which is at least an effort to recognise in some reasonable degree the present state of knowledge as to the physico-chemistry of biology.

Under the classification of foods by various authors: Parke's Hygiene gives: (1) Nitrogenous; (2) Fats and oils; (3) Sugars; (4) Water and salts, magnesium, calcium, potassium, sodium and iron as chlorides, phosphates and sulphates.

Currier Practical Hygiene gives: (1) Water; (2) Salts; (3) Albumins; (4) Fats and oils; (5) Starch and sugars.

Mrs. Hart in Diet in Sickness and Health says: Foods are divided into two classes: (1) Nitrogenous; (2) Non-nitrogenous, and being a woman adds a postscript: Inorganic water and salts.

Coplin and Bevan, in Practical Hygiene give: (1) Nitrogenous; (2) Fats and oils; (3) Starches and sugars; (4) Inorganic compounds, and adds to the latter that these demand no comments.

Richards and Woodman, in *Air, Water and Food*, give: (1) Nitrogenous; (2) Fats and oils; (3) Starches and sugars; (4) Mineral salts.

Egbert, *Hygiene and Sanitation*, gives: (1) Proteids and albuminoids; (2) Carbohydrates; (3) Fats and oils; (4) Mineral salts.

Bergey, in *Principles of Hygiene*, makes no classifications of foods but recites constituents of the body inorganic and organic and then says: "All these various elements and chemical combinations constituting the composition of the body, must be supplied in the food supply in order that it may perform its normal functions and obtain energy for all of man's activities in life."

Stockton, in *Personal Hygiene* (Pyle), gives: (1) Nitrogenous substances; (2) Fats; (3) Carbohydrates; (4) Salts.

Rohe in *Textbook of Hygiene*, gives: (1) Water; (2) Salts; (3) Proteids; (4) Fats or carbohydrates.

Wilson, in *Handbook of Hygiene and Sanitary Science*, gives: (1) Nitrogenous albuminates; (2) Fats or oils; (3) Sugars and starches; (4) Water and saline matters.

Harrington, in *Practical Hygiene*, gives: (1) Proteids; (2) Fats; (3) Carbohydrates and organic acids; (4) Water and mineral salts.

WHY AIR AND WATER ARE FOODS.

The facts which to my mind should compel us to include air and water in our list of foods, and should also give them a place at the head of that list, are found in a consideration of what are foods, what is a food? Let us listen to some definitions:

Friedenwald and Ruhräh says: "Food is matter that is taken into the body to supply nourishment, or to replace tissue waste."

Bergey quotes Dr. Atwater's definition of food as follows: "Food is that which when taken into the body, builds up its tissues and keeps them in repair, or which is consumed in the body to yield energy in the form of heat to keep it warm and create strength for its work."

Hutchinson says "A food may be defined as anything which, when taken into the body, is capable of either repairing its waste or furnishing it with material from which to produce heat or nervous and muscular work." Harrington says: "Foods may be said to include everything taken into the system capable of being utilised directly or indirectly to build up normal structure, repair waste, or produce energy in any form."

Let it be noted that the descriptive terms of these definitions are distinctly inclusive in character. "That which;" anything which;" "everything taken into the system."

Again, it may be observed that the eminent writers are having in mind the essential fact that these food substances are

taken into the system, and they treat as immaterial and non-essential the route to that system, be that route by nose and lungs, or be it by mouth and stomach. The destination, the system is the thing,—the route is not material.

Again, observe the inclusiveness of the phrase "capable of being utilised directly or indirectly." In these words the writer seems to have in mind a number of substances and chiefly some of the mineral salts which are incapable of oxidation, which pass into and through the system unchanged, and therefore a superficial examination might lead one to the conclusion that they could in no sense be considered foods; but upon more intimate study, it is learned that these substances are habitually found in living cells, that these substances are constantly given off from living cells, and that these substances must be constantly furnished as part of the food supply of living cells, and that therefore these substances should be included and rated as foods, hence the inclusive description "capable of being utilised directly or indirectly." It would seem that several tests or measurements are to be given any substance claiming to be a food. First, it must be some form of matter; second, it must enter the system; third, it must contribute directly or indirectly to the growth of cells or of the individual; fourth, it must aid directly or indirectly in the repair of waste; fifth, it must contribute directly or indirectly to the production of some form of vital energy.

With these tests or measurements in our minds, let us examine our substances,—air and water,—and learn if their relations to metabolism are such as fit them for places in the list of foods. We will agree that air is matter, and that it is taken into the interior of the body through a complicated and specially devised mechanism whereby one of the constituents of the air is prepared for absorption into the system, and we will further agree that a certain proportion of each separate meal of air so taken into the body, so prepared for absorption, is absorbed and the residue is promptly extruded from the body after the manner of the excrements in general. We will probably further agree that the more important constituent of air,—oxygen,—which is absorbed directly into the system is utilised directly or indirectly to build up normal structure, repair waste, and to produce energy in every form. It possibly may help some of us to make this realisation more actual, more vivid, to recall that Thompson quotes Moss as authority for the statement, that the body of a man weighing 148 pounds contains 92.4 pounds of oxygen, about three times as much as the next in weight, the carbon which weighs 31.6 pounds.

When we further recall that oxygen is an essential constituent of every tissue, fluid and cell of the body, that it is found in all

of the excretions, that it is the active and energising agent in all of the chemico-metabolic reactions wherein and whereby vital energy is manifested, that when the supply of atmospheric oxygen is stopped for one minute, there is distress, for two minutes there is mortal anguish, and for three minutes there is the death of the individual, it would seem that we must conclude, not only is air food but also that air is the food.

The proof as to the right of water to be considered as an important food follows about the same lines as in the case of air, and in certain respects is more readily convincing. Many of us are dependent upon sight and smell and taste and touch in our recognition of matter, and although we may profess differently, the fact remains that it is easier for us to realise the materiality of water than it is of air. The contents of the bathtub, of the water jug, of the snow bank or of the swiftly flying snowball, or of the ponderous iceberg do not permit one to doubt that water is matter. I think all will admit that it would be quite a bit more difficult for us to reach such a conclusion if we knew of water only in its physical state of a pure gas, as found constantly present in the air. I refer to this for the reason that it seems to me quite probable that the failure of our masters and teachers to consider air as one of the foods comes in part from the unconscious reluctance to consider air as matter. Be this as it may the evidence in the case of water is easily convincing.

Neither do we need argument to convince us that water habitually enters the mouth and the system. The pleasures of the palate and that delightful something which comes to some of us after a few glasses of beer or of wine or of hot Scotch, remind us that water does enter the system and that frequently. The role of water as a factor in living matter is enormous but may be quickly stated. Water is the most abundant constituent of living matter, comprising all the way from 2 to 3 per cent. of the most dry of the tissues up to 95 per cent. or even higher of the blood and the lymph. Water serves a most important rôle in metabolism and growth, as an organising fluid for the colloidal matter, and as a solvent for the crystalloids, making a medium of exchange between the cells, the different tissues and organs, and the fluids of the body, serving most important uses in all metabolic processes. Water also aids directly as a nutritive substance, yielding its constituent elements for the construction of essential compounds of living matter. It further makes anabolism and katabolism possible by its action as the universal solvent, whereby all other foods are prepared for absorption for the penetration of cell membranes or walls in anabolism; and whereby all excretory substances are enabled to pass through those cell membranes

or walls in katabolism. In fact, upon the peculiar properties and constant presence of water depend all of those metabolic growths, repairs, activities and energies we know as life.

Thompson gives us a most interesting table from Moss:

The chemical analysis of a man—weight, 148 pounds, and names the several weights of oxygen, 92.4 lbs., hydrogen, 14.6, carbon, 31.6, nitrogen, 4.6, phosphorus, 1.4, calcium, 2.8, sulphur, .24, chlorine, .12, sodium, .12, iron, .02, potassium, .34, magnesium, .04, and then adds this sentence which is characteristic of the best literature of the subject: "All these elements are necessarily derived from food and water plus the oxygen of the air which is breathed." In my opinion the facts of biologic chemistry not in dispute by sane people require that this statement be made more simple, more direct, more accurate after this manner.

All these elements are necessarily derived from food.

Before dismissing our consideration of the evidence as to the position of water near the head of the list of foods, it may be well to recall two quite significant facts.

1. The frequency with which water is taken by all sorts of men, as drink, as beverage, as fruit and vegetables, and as an important part of most of our so-called dry foods.

2. The most significant fact of the shortness of the time one can live without water,—five days,—as compared to the length of days,—more than 40,—one lives without the so-called foods if water is drunk!¹

THE CASE OF THE FOOD SALTS.

In addition to the four great elements,—oxygen, carbon, hydrogen, nitrogen,—there are found in living tissues calcium, potassium, sodium, magnesium and iron. These elements are found in combinations as phosphates, sulphates, carbonates and chlorides. Of these inorganic substances it is to be noted that each one is essential and indispensable to animal life, as with the exception of sodium they are essential and indispensable to plant life. Observation has demonstrated that these substances are present in many of the articles upon which men depend for food, as mineral waters, in the cereals, in vegetables and in fruits, and in all of the meats and other foods of animal origin.

Observation has also established that these substances are habitually found in man's excretions, showing thereby that man

1. Proportions of the several chemical constituents of man's body—weight 148 pounds—after Thompson and Moss: Oxygen, 4,620; to iron, 1. Carbon, 1,630; to iron, 1. Hydrogen, 730; to iron, 1. Nitrogen, 230; to iron, 1. Calcium, 140; to iron 1. Phosphorus, 70; to iron, 1. Potassium, 17; to iron, 1. Sulphur, 12; to iron, 1. Sodium, 6; to iron, 1. Chlorine, 6; to iron, 1. Magnesium 2; to iron, 1.

needs them in his food; and, finally, experiments have demonstrated in plants and in animals alike that growth, repair of waste and metabolic functions, life is impossible without the constantly renewed presence and physico-chemical activities of these substances.

Furthermore, it is known that in plants and animals there is the faculty of nutritional forethought, the expectation that there may come a time of want, the knowledge that in times of prosperity preparation should be made against this need, and apparently for this purpose the tissues of plants and animals are capable of storing these invaluable inorganic treasures much as bees store honey and the camel stores water against a time of want. Therefore, plants and animals in case of starvation from these substances live for a time upon their accumulated stores, but these once exhausted, death is inevitable and we will do well to try and remember that death is inevitably the result of starvation from any one of this group of inorganic nutrients.

An interesting fact should be cited here in connection with Liebig's Law of the Minimum, which is to the effect that individuals, plants and animals require a certain amount of each of these mineral nutrients for growth or life, that plants and animals are capable of absorbing and usually do absorb more of each of these substances than this minimum, that these substances are capable in a slight degree of replacing each other or some of them in metabolism. For instance, with an excess of sodium an individual can live with less than the minimum of potassium, and in like manner magnesium can in a degree replace calcium, and that growth and normal function is impossible when the supply of each substance is reduced to the minimum. I have the conviction that the consideration of the metabolic relations of the mineral nutrients leads us into the arcana, the holy of holies of the art and science of nutrition, to the intimate facts of life; also that recent advances of our knowledge in this direction are illuminating, hopeful and inspiring to a degree and I would there was time that we might give consideration to some kindred and most interesting topics.

The role of the mineral nutrients in dissociation in ionisation, the importance and actions in metabolism of ions, anions and cations between cells and intercellular lymph; the relation of the mineral nutrients to surface tension, to solution tension, to permeability, to osmotic pressure, to osmosis, to the physics of absorption, to nutrition, to life, these are chapters of a paper which if well written would be worth hearing. However, we must come back and sum up the evidence, which seems to amount to proof, that the inorganic salts before named are entitled to be

classed as foods, entitled to give the name to our first and most important group of foods,—the mineral nutrients—air, water and the salts.

First, these are material substances—matter. Second, they enter the system in a wide variety of foods, mineral, vegetable and animal. Third, they are essential directly or indirectly to growth, repair of waste and the production of energy to metabolism,—to life.

It would seem that we have proved our case, that there is a class of foods which may properly be called mineral nutrients; that this class includes air, water and the salts; that this group is an important group. But some one may perhaps be thinking and anxious for the time to arrive when he can say—suppose we grant all that, what use is it, what advantage is there in it, what more do we know of the mineral nutrients and their role in metabolism, what more do we know of dietetics, how does this contention in any way aid the progress of scientific dietetics, what is the practical good of your paper any how?

I would like to conclude with some observations more or less practical in character, and more or less intended to answer some of these inquiries. As to the elemental motive of this paper, I would like to observe that it comes from my conviction that the union of the sciences of botany and zoology in the single science of biology is one of the most energising, illuminating, potential, seminal facts of the century, one which means much to the medical profession, one which that profession does not seem to appreciate adequately, and one which has a special message of hope and progress to the growing science of dietetics and to dieto-therapeutics. There was profound knowledge in the saying of the ancient, "Man is a plant with his roots inside." There is the wisdom of inspiration in the writer of today when he says, "The more we know of plants and animals the more we find they resemble each other." It is my conviction that our way to a better knowledge of dietetics in man runs through a study of the nutrition of plants and this is primarily and chiefly a study of the mineral nutrients. My impression is distinct that the botanists can teach the doctors many a lesson of value, that the knowledge of the metabolism of plants is more accurate, more demonstrative, more scientific than our notions of the metabolism of animals and man.

Again, we all agree that a badly cooked meal or a meal of improper food like tainted meat or impure milk, is distinctly objectionable and offensive, and we are quick to protest with emphasis against one single offense of this character; and at the same time, possibly, in the same house and even in the same

case, we sit day after day and week after week in supine complaisance, at least without protest, to some ten or fifteen thousand meals a day each one of which is impure and tainted, the air of the room warmed by the pipeless stove, by the grate without a chimney, or ventilated by the fan in the basement.

There is something quite like latent Eddyism new thought in the minds of many of us which makes us so unobserving or so tolerant to the dangerous, the most pathogenic of foods,—foul air. In comparatively recent times distinct advance has been made in the diagnosis of the diseases of metabolism, and interesting paragraphs are devoted to the discussion of the evil results of the fermentation of the sugars and starches, and of the putrefaction of the albuminate food. I recall with gratitude the comfort which came to me with my notions as to the value of the mineral nutrients, that at least these foods would neither ferment nor putrify. It is possible that you may not be much impressed by these, the negative virtues of the mineral nutrients, but the longer I study the evils of fermentation and putrefaction, of neurasthenia gastro-colonica, the more I am persuaded that foods free from these dangers have a wide range of opportunity for usefulness.

In the foregoing I had in mind diseases in which metabolism is disturbed in a chronic way. There are other diseases of a more acute character in which metabolism, say for starch or albuminates, is still more seriously interrupted for the time being; for instance, in acute nephritis with convulsions, as in cases of that trouble following scarlet fever. I remember well cases of this kind and the comfort it was to me to recall that not only would the diet of the mineral nutrients not ferment and not undergo putrefaction but, moreover, that my patient had acquired, possibly from his plant ancestors, the habit of storing the invaluable elements of nutrition,—nitrogen and starch and sugar and fats against a day of want, and that these deposits of nutritive treasures were now his and that there were enough of them to support him in safety for months,—provided that the usual supply of the more important nutrients be continued. This positive knowledge gives the physician calmness and courage, enabling him to face the anxious and over anxious parents, and the solicitous and meddlesome friends with encouragement and confident assurance.

One of the most vivid recollections of my life is the hopefulness in the treatment of the acute diseases, involving questions of disturbed metabolism coming from a belief in the effectiveness of the mineral nutrients,—air, water and salts,—in fact, the all sufficiency of these nutrients to answer the demands of metabolism for weeks and weeks together.

The diet, and the diseases of the aged present to us a problem of metabolism of singular interest. Our habits of eating and drinking are formed in early life when the demands for growth and the various activities are enormous. These habits are too frequently followed in later years without intelligence or reason because they are habits. Again, old age is the autumn of life,—the time of preparation for the winter of life,—death. In autumn the nutritional activities of spring, of summer, of harvest, are over, the leaves ripen and are ready to fall at the first touch of frost, the sap recedes and all of the nutritional activities of the tree lessen and lessen almost to the point of complete inactivity. It is the same with man. The demands for growth are long since passed and over, the keenness of nervous sensibility is passing, the demands for the expenditures for procreation are lessening and should be over; the organism has the advantage of the accumulations of years and years of stores of proteids, of sugars, of fats; with lessening demands for nutriment, there is in a marked degree lessening capacity for anabolism and for katabolism; and still in spite of all this, the habits of eating and drinking of the twenties, the thirties and the forties, continue to be the habits of the fifties and the sixties; and chiefly by reason of these habits, so few men reach the seventies and the eighties.

The problems of anabolism and katabolism of the aged in sickness and in health are at once the most intricate, most difficult and most important, which may engage the attention of the medical man. The knowledge, actual and potential of the role in metabolism of the mineral nutrients,—air, water and the salts,—is an invaluable aid in the solution of these problems.

Let it be remembered that the mineral nutrients include the salts of calcium and magnesium, and it will be well here to recall, that in angiosclerosis and with greater particularity, in arteriosclerosis, the pathological deposition of these salts in the diseased tissues is characteristic.

We already know that each food has its minimum, its medium and its maximum, and we are slowly learning that the misuse of foods, by under use, or by over use, is an important factor in the production of disease. I have the most positive conviction that a more thorough knowledge of the role of the mineral nutrients,—salts in metabolism,—will throw important light upon the causation, the prevention, and the treatment of rickets, scurvy, anemia, chlorosis, tuberculosis, diabetes, calculus, myositis ossificans, angiosclerosis, or morbid conditions involutional in character.

The introduction of hypodermoclysis and its rapid growth in confidence and popularity is an instance of the potential value of

the mineral nutrient salts in therapeutics, also an apt illustration of the fact that in nutrition the food is the thing, and in general the route, by nose and lung, by mouth and stomach, by colon, by the cellular tissue, or by the veins, is non-essential. However, in a given case the route selected may mean success or failure, life or death. Sodium is an important member of the class of mineral salts and its chloride one of its more important combinations, but it is important to keep always in mind that potassium, calcium, magnesium, phosphorus, sulphur and iron are also members of that class, and it would seem to be absurd to conclude that sodium and its one salt the chloride, should monopolise all the therapeutic potentialities of the group.

To my mind the fact that water bearing a certain portion of sodium chloride in solution, has been found of enormous value in therapeutics when given in hypodermoclysis, in enteroclysis or by the endovenous route, should convince us that each and every one of the mineral nutrient salts has similar therapeutic potentiality. Experiment and observation have only to determine the conditions requiring such medication, and the form in which the remedy is to be administered.

I may here remind the reader that the work done with the solutions of sodium chloride has been for the greater part confined to the use of isotonic solutions. So far as I know the value of this remedy in hypertonic and hypotonic solutions is yet to be demonstrated by experiment and observation.

SUMMARY.

The right classification of foods is a matter of great importance to right living and in the prevention and cure of disease.

In the right classification of foods the mineral nutrients,—air, water, and the salts will constitute class one.

This classification is demanded by our growing knowledge of biology and also in the interest of the art of medicine, that we may the more effectively advise our patients.

433 FRANKLIN STREET.

Renal Decapsulation for Puerperal Eclampsia.¹

By WILLIAM B. JONES, M. D., Rochester, N. Y.

ECLAMPSIA occurs in about four of one thousand labors and one of these is fatal. This varies greatly in limited numbers of cases, periods of time, and locations, but is very constant in the statistics of many thousand when combined. Those women who engage and report to the physician during preg-

1. Read at the forty-first annual meeting of the Medical Association of Central New York, held at Buffalo, October 27, 1908.

nancy are treated on appearance of premonitory symptoms, and it is prevented in most, but not in all patients. Some women do not and then we have no chance to employ prophylaxis. When eclampsia occurs treatment saves three, but after all methods have been exhausted one patient is still growing worse, and there is nothing more to do but continue some of the same remedies which have not prevented rapid increase of her danger, and she dies. Just here renal decapsulation offers to save. It was first proposed by Dr. George M. Edebohls of New York, as is well known.

I have secured abstracts of all cases published in medical literature up to September 20, 1908. They are twenty-four and to add two of my own, twenty-six in all. In every one, other measures had been exhausted and the patient was growing worse, there had been coma for hours, most of them had fifteen or more convulsions, rapidly increasing fever and weak rapid pulse. Some had pulmonary edema very marked. In other words, all were in a condition threatening speedy dissolution. Every autopsy showed rapid extreme parenchymatous degeneration, comparable to what might be caused by a most violent poison, complete strangulation of blood supply or violent infection, and all who recovered showed in the urine evidence of a severe acute nephritis.

Of the recoveries the one with the mildest symptoms had about fourteen convulsions in twelve and a half hours, during which delivery was instrumental; operation at 7 p. m., two more convulsions, but next morning the patient was bright and well started in convalescence. There were also among the recoveries almost all kinds of cases,—before term with premature labor, before term operation and pregnancy continuing to a normal labor at term, full term with unassisted delivery, with ordinary forceps delivery and with forced delivery. One of the worst cases that recovered had the first convulsion six hours after a severe labor, did not recover consciousness but passed into complete coma and so remained. After twelve hours she had had fourteen convulsions with progressive rise of temperature to 105, weakening and rapidity of pulse till it was about 200, but could not be accurately counted, failure of circulation until the surface was livid and change of color upon removal of pressure of a finger tip was very slow, pulmonary edema until the fluid ran from the mouth in a continuous stream for some time after turning the patient on to her face, suppression of urine to the extent of only two ounces by catheter in six hours or longer,—altogether a typical moribund condition. Yet this woman in the second twenty-four hours after operation passed over 100 ounces

of urine, besides what was passed with about eight stools which were also mostly water. This urine contained a very large amount of albumin and many kinds of casts in abundance. Her recovery was rapid and now after eighteen months she is perfectly well. The urine is normal. Another, one of Dr. Edebohls's cases, had typhoid in the fourth month, nephritis beginning in the seventh. There were convulsions at the end of the eighth, five severe ones in sixteen hours. After forced delivery she was free from them forty-six hours, but had six or more during the next eighteen. Then she had double *decapsulation*, no more eclampsia and rapid recovery. I am aware that desperate cases may recover without renal decapsulation but this one was extreme. I would like to know of all as bad that have.

The theory of the action of this operation is reasonable. Whatever the remote cause of eclampsia the condition is mainly toxemia and insufficient elimination. This is shown by its mode of onset, the prodromata when present, and by the degenerations of parenchyma of liver and kidneys, as well as by the improvement from eliminative treatment of any kind when the condition has not gone too far. One might suppose that elimination by the kidneys is normal if urine of ordinary density and quantity is being passed, but that does not matter because far more than normal elimination is demanded and there is no assurance that what would ordinarily be sufficient is so at the time. Every one who recovered after operation, very soon began to pass largely increased amounts of urine and solids, of urea, too, when that was measured.

The kidneys are particularly affected. They become congested to the extent of stoppage of function and later total disorganisation. Irritated by toxins in the urine the parenchyma begins to swell, the finest vessels are compressed and cannot carry away the blood brought into the organ, congestion of irritation is increased by congestion of mechanical obstruction and passes on to degeneration of parenchyma, which is practically necrosis, but not quite as rapid as it would be if the circulation were entirely blocked as by a ligature around the main vessels. This is not theory devised to fit the symptoms or even the post mortem findings, but an explanation of conditions at operations upon those kidneys during the progress of the disease, observations upon the process itself, not upon the results after all damage has been done.

All operations done fairly early showed enormous swelling, in some described in apparently extravagant terms; several in only one kidney, some in both, the bulk of the organ as a whole being greatly increased. Those done late showed the same with

softening that in one or two approached putrefaction which did occur very quickly after death. All were darkly colored by congestion, the most so being almost black. Hemorrhagic infarcts and large hematomata have been found. It should be noted that one kidney may seem to be nearly or even quite normal, the other showing all the disease.

Division of the capsule simply relieves pressure and permits the compressed vessels to carry blood again. If a sponge be squeezed in the hand water cannot pass through it, but if the hand is opened it swells, its channels open and permit the passage of a good stream. During the operation there is also some bleeding from the kidneys which helps and it may be well to favor that by small incisions. The patient is usually comatose and needs no anesthetic. She should be placed prone upon a table with a kidney pillow under her waist. Make any usual incision to reach the kidney; part the perirenal tissues enough to see half its length, cut a line longitudinally, near but necessarily immediately upon the convex border, slip two fingers inside the capsule and strip it off the kidney. Tuck it back so that it will stay off from the raw cortex and suture the loin incision rapidly. One minute should complete each side except closing the incision.

There need be no hesitation in deciding whether an operation is advisable, or when. The first twelve hours of eclampsia usually decides a woman's fate. The danger becomes greater with the frequency and severity of the convulsions, the persistency and depth of coma, rapidity and weakness of pulse, the height above normal of temperature and the rapidity of its rise, with the quantity of albumin and casts and inversely with the quantity of urine. Pulmonary edema denotes the beginning of death, but not always that it is too late to bring back life. If at the end of twelve hours she has had fifteen or more convulsions which are growing more severe or often, coma is uninterrupted, temperature is rising and pulse growing faster and weaker, she is doomed unless more can be done than remedies already used can do.

Before that time the physician should know whether non-surgical treatment will cure the patient. By rapid intelligent work all methods should be applied, and before eight hours he will have used them and secured results that either justify continuing in the same way or demonstrate that they are unequal to the case. As soon as that point is reached renal decapsulation is indicated immediately and cannot be hastened too much. The changes in the kidneys progress so rapidly that the condition is an emergency and should be treated like one, with uninter-

rupted presence of the physician, exhibition of remedies, rapidly, systematically without procrastination. Let him know what he will and will not do, and act promptly every move.

I can think of no possible objection to decapsulation. There is no anesthetic or shock and other treatment is continued without interruption. Of the twenty-six cases now known, all had reached a condition believed to be hopeless. Many, as is true of every measure not yet established in general confidence, were delayed long beyond the proper time, one had convulsions, coma, jaundice and anuria continuously for eight days before operation and some others were no more favorable, some having had long existent chronic nephritis. Some who apparently would have recovered died from acute bronchitis, from pneumonia and one after twelve days from septicemia originating in the wound. Yet thirteen got well. It is too much to claim that renal decapsulation should be credited with all of these? We must agree that it did save many when nothing else could avail; 50 per cent. under these circumstances in the infancy of the operation. With just a fair chance, it will do much better.

With the beginning of eclampsia all accepted treatment should be carried through, the various remedies being used simultaneously as nearly as possible and the rest in rapid succession, the response to treatment being carefully noted. This will all be finished in six or eight hours and by that time if the condition is not satisfactory, if recovery is not reasonably certain, decapsulation should be done upon both kidneys. It should have been considered and arranged for before this to avoid delay by discussion with the family, or preparation for operation.

The following is a report of my own cases:

Case I.—Mrs. W., age 38 years, had had four normal labors; at term in fifth pregnancy; had had severe headaches, dimness of vision, epigastric pain and swelling of limbs for four to six weeks, but no medical attendance. Labor pains severe for about eighteen hours, then instrumental delivery at 6 p. m., August 15, 1907. Condition normal until first convulsion at 11.30 the same evening, passed directly into coma which persisted. At 11.30 next morning medicine, packs and sweating had been tried; she had grown worse all the time; had had fifteen or sixteen convulsions; pulse 180 to 200; very feeble, surface livid, capillary circulation very sluggish, pulmonary edema very marked. Temperature, 104.6 and rapidly rising (within the next hour it got to 105.4), urine by catheter, two ounces in six hours, loaded with albumen, various kinds of casts, blood and debris. At 12.30 noon, both kidneys were decapsulated. Both were deeply congested, one enlarged. There was one convulsion about an hour after the operation and no more. The temperature, edema

and pulse regained normal in about forty-eight hours. Secretion of urine began to increase in about six hours, and in the twenty-four hours following the first twelve after operation amounted to over 100 ounces, besides what was passed with about eight stools themselves mostly water. This amount of urine continued several days. Consciousness began to appear thirty-six hours after operation, but was not complete until about five days. Repeated examinations recently show the urine to be normal in all respects. She is strong and well fourteen months after the operation.

Case II.—Mrs. E., age 36; third child. First labor normal; second preceded for about one month by albuminuria and swelling of the feet that improved under treatment. When about at term convulsions occurred without labor. Forced delivery was resorted to at once and she recovered rapidly. With the third pregnancy there were albuminuria and swelling of feet at the end of the seventh month, which again improved satisfactorily under treatment. Normal labor, August 11, 1908, at 11.30 p. m. Very soon she had agonising headache and vomiting, which persisted until the first convulsion at 9 a. m., August 12, immediately followed by coma, from which she never awakened. There were five convulsions in the first hour, no more till 3 a. m., August 13, when there was one, then several about 9 a. m. At this time the pulse was very weak and rapid and growing more so; temperature over 104 and rising, pulmonary edema present: marked anuria. Decapsulation of both kidneys at 11 a. m. Both very much enlarged and deeply congested. There was no improvement, no increase in amount of urine or lessening of coma or other symptoms. She died about 9.30 p. m. the same day.

BIBLIOGRAPHY.

- Edebohls: N. Y. Med. Jour., 1903, LXXVII., p. 1022. 1 case. Recovered.
 Edebohls: Boston M. and S. Jour., Vol. 150, 1904, p. 586. 1 case. Recovered.
 Edebohls: Ctbl. f Gynækol, 1906, XXX., p. 719. 1 case. Recovered.
 Chambrelent and Pousson: Bull. de l'Acad. de med., 1906. Vol. LV., 489. 1 case. Reported by Pinard. Recovered.
 Jardine: Jour. of Obstetrics and Gynecology, 1906, X., p. 32, 34. 1 case. Died.
 De Bovis: La Semaine Medicale, Mar. 6, 1907. 1 case. Recovered.
 Pieri: Annales de Gynecol. et d' Obstet. 1907, IV., p. 257. 1 case. Died.
 Treub: Annales de Gynecol. et d' Obstet. 1907, IV., p. 314. 1 case. Died.
 Gauss: Ctbl. f Gynækol, 1907, No. 19. 2 cases. Recovered.
 Polano: Ctbl. f Gynækol, 1907, No. 1. 1 case. Recovered.
 DeCotrel: Union Medicale du Canada, XXXVI., June 1, 1907. 1 case. Died.
 O. Franck: Munch med. Wochenschr., Dec. 10, 1907. 1 case. Died.
 Wiemer: Monatschrift f Geburtshulfe u Gynækologie, 1908, XXVIII., p. 321. 3 cases. First case, recovered; second case, died; third case. recovered.
 Asch: Abl. f Gynækol, 1908. No. 2. 1 case. Recovered. Reported by Falgowski.
 Asch: Ctbl. f Gynækol, 1908. No. 9. 1 case. Recovered.
 Kleinertz: Ctbl. f Gynækologie, 1908. No. 26. Two cases. First case, died; second case, recovered.
 Essen-Møller: Ctbl. f Gynækologie. No. 14. 1908. 1 case. Died.
 Hamin: Ctbl. f Gynækologie, 1908. No. 20. 1 case. Died.

Vaccination for Smallpox. Should it be Discontinued and Abolished?

By JAMES B. COLEGROVE, M. D., Washington, D. C.

I HAVE observed that there has been some propositions made in medical societies that vaccination as a preventive for smallpox be discontinued,—that there is more harm done by vaccination than by the disease itself. I have seen several published statements of this character, in which it was strongly urged that vaccination should be abolished. The subject seems to have attracted considerable attention, and I cannot believe that a thoughtful physician would urge this, if the history of smallpox is carefully considered. It is claimed that in some instances blood poisoning has occurred as a result of vaccination, and no doubt this is true. But the number of such cases bears no comparison to the many who have been vaccinated with no untoward results. Erysipelatous inflammation, or suppuration is sometimes, but rarely known to occur, excepting when the person is peculiarly susceptible to skin diseases.

HISTORY OF SMALLPOX.

Our present knowledge of the first appearance of this dread scourge was given by an Arabic physician named Phazes in the eight century. It first appeared, so far as we know, in south-eastern Europe, and it prevailed all over Italy, as well as southern Europe during the ninth century. It invaded France and Spain, and spread with terrible violence through Austria and Hungary, and finally it devastated Prussia and England. In the following century it ravished Northern Europe and spread to Sweden and Norway. There was no known method of treatment that could in the least degree prevent the disease, and the whole of Europe was filled with victims who had survived the attacks of the disease, whose faces bore evidence of the awful results of the dread visitation.

In 1620, it appeared in San Domingo, and thence it traveled to Mexico, where four millions of people died from the fell destroyer. In 1740 it swept over South America, where several millions succumbed to the malady. Again, in the same year, it broke out in Northern Europe, and crossed the cold waters of the north to Iceland and finally to Greenland, which latter country was nearly depopulated.

HORRIBLE SUFFERING.

No language can adequately describe the horrors, the despair, the woe suffered by the people in Europe in the fifteenth and sixteenth centuries from smallpox. During these dread visitations there was no remedy, no help, nothing that could alleviate

the woe-bestricken people. In the years between 1700 and 1770, the scourge swept all over Germany, carrying away millions, and leaving a trail of sorrow and death which no pen can portray. No disease was ever more contagious, and none which rendered its victims more helpless. But, after forty millions of people had been destroyed by this malady Jenner most providentially appeared to the world, and put in check its ravages.

Edward Jenner was born in 1749. He was the son of an obscure vicar in Gloucester, England. He was the one who was destined to rescue the world from the devastation of this terrible pest. His career was both strange and remarkable, and no one imagined that he would rise to imperishable fame and honor. He emerged as it were from oblivion, to a renown few men have reaped in this world. He was first apprenticed to a man named Daniel Ludlow who lived at Sudberry, where he studied for the profession of medicine and surgery. Later he was a student in St. George's Hospital in London. He was then 30 years of age. He was extremely ambitious to reach a high place in the profession. After a voyage for his health, he returned to his native town at Berkley, and began the practice of medicine and surgery. Meantime, after mature study and thought, he began to experiment in vaccination. For two years he followed in this line of investigation, and after having secured virus from a young heifer, he began vaccination of young persons, who consented to be exposed to smallpox. Considerable notoriety arose from his experiments, and he was bitterly attacked in London, by the medical profession and, remarkable to state, also by the clergy. Nevertheless, he persevered and finally announced that smallpox could be prevented. Committees from the profession of London visited him and were confounded by demonstrations of actual cases. Then came the announcement which was made by these committees to the world that Jenner's discovery was a real and true one, and that he was entitled to all honor.

This announcement was like the proclamation of a revolution. Immediately agents from Germany, Austria, France, and Spain were sent to see him and obtain the virus, together with instructions as to the manner of its use. He was overwhelmed with honors. The Parliament voted him \$10,000. This he declined, declaring that his reward was in the realisation of what he had accomplished. But so great was the sentiment of gratitude in England, that Parliament a year later, again voted him a donation of \$100,000. He was the recipient of other gifts from European nations, and thousands of pounds sterling were laid at his feet from Asiatic countries. The Empress of Russia sent him an autograph letter, accompanied by a diamond of immense

value. She notified him that she had vaccinated her first child whom she had named "Vacinnoff."

And now honors came thick and fast to Edward Jenner. His name was presented to institutions of learning all over Europe, in which he was made a fellow or member. The British Government ordered that the army should be vaccinated, and vaccination was made compulsory in Germany, as well as in all the other countries in Europe. Also became the practice in the United States.

SMALLPOX EXTERMINATED.

So this terror that had swept away its millions was exterminated as a scourge from Europe in a single decade. And in another decade it was driven from the whole world! It would take too much time and space to mention the evidences of gratitude manifested by the nations of Europe towards this remarkable man, Edward Jenner. His name was a household word, and praise was given to Almighty God in the churches in England, for Edward Jenner. A monument was erected to his memory in London during his lifetime, and later, after his death, a statue was placed in the Cathedral at Gloucester, near his birthplace. Among the men who have arisen to lasting fame none has better deserved the gratitude of mankind. Jenner died in 1842. Today, men have not forgotten him. The medical profession know that were vaccination unknown, it would be impossible to stop the plague. No doubt there are remedies that might ameliorate the conditions, but in crowded tenements, and certain localities small-pox would again spread over the world.

VACCINATION CANNOT BE DISCONTINUED.

It is absurd to insist that vaccination be discontinued. Those who have urged this, have pointed to instances of blood poisoning. These instances, I again declare are isolated, and when compared to the number who have received no injury from vaccination are as one in a thousand—probably a less proportion. It is impossible to always secure absolutely pure virus, but generally, at this time virus is very pure. In fact, there are records of thousands of young persons and children in whom no damage has occurred from vaccination. All over the civilised world, now, it is made compulsory, and very properly so.

Perhaps another Jenner will arise and announce to the world that a prophylactic has been discovered which will prevent tuberculosis, and drive this dread malady from the homes of mankind! Let us so hope and pray!

1000 MARYLAND AVENUE.

A New Duty of the Medical Profession: The Education of the People in Scientific Medicine.¹

By S. W. S. TOMS, M. D., Nyack, N. Y.

IF I were to conform to the usual custom in acknowledging the honor conferred upon me on this occasion in presiding over this distinguished gathering of physicians, assembled from the six counties that comprise the First District Branch, I should be appropriating a distinction not meritoriously bestowed. "Some acquire greatness, others have greatness thrust upon them."

I was neither elected, selected, nor appointed to preside at this meeting as your president. I was commanded to do so by the secretary of the State Society in a letter received from him last March, because the gentleman, who by election and promotion should have filled the office had defaulted in the ranks; and because of this "It was up to me"—in the memorable words of our courteous secretary. If this imposes upon you any suffering, I assure you it is the fault of the by-laws in not providing a second vice-president, upon whom I might shift any effect of your misfortune. I am here to fill a vacuum.

In my official visits to the county medical societies I have gained some impressions of society meetings and organisation, which seems to me an appropriate subject to present on this occasion. The papers and discussions on medical subjects, which it was my privilege to hear, were of a high order of merit, and marked evidence of harmony and good organisation,—the fruits of a reunited profession in this state,—were every where conspicuous.

There is a notable disposition by some societies for an organised effort in protecting the public by suppressing quackery. New York county has been the pioneer and the best exemplar in this commendable warfare on the charlatans of all kinds. Crandall, in his report of seven years of official connection as a member of the Comitia Minora of the Medical Society of the County of New York, at its one hundred and second annual meeting, details in the most comprehensive manner the very successful work of that society. He very truly says: "Enforcement of medical practice laws, and the protection of the public against illegal and criminal practitioners, are among the duties which the county society owes to the profession and to the public." "The state and county societies in New York were organised pursuant to the important law of April 4, 1806, and the duty of

1. Presidential address delivered before the First District Branch of the Medical Society of the State of New York, at the second annual meeting held at Poughkeepsie, October 21, 1908.

regulating medical practice was placed on them by the State at their inception." Kings County also, I learn, has done admirable legal work in prosecuting quacks.

At a meeting, which I attended at White Plains, September 15, 1908, a report was presented of what had been accomplished by a letter written by the counsel for the state society, coöperating with the Medical Society of the County of Westchester, in suppressing a notorious illegal practitioner. The evidence had been secured by the medical society with proof sufficient to have convicted him, at a trifling expense, had he not left the city very promptly; and cases from Yonkers, New Rochelle and other places in the county have been likewise dealt with, with gratifying results.

The presidents of the county societies have appointed committees to secure data from all sections where illegal and itinerant practitioners are violating the medical act and imposing on the public. The state society is desirous of securing sufficient reliable information from such authentic sources as a basis for future legislation. The difficulty which confronts a medical society in prosecuting local imposters is very obvious. The district attorneys and magistrates owe their appointment to the suffrages of the locality, and are frequently disposed to regard complaints as persecutions; and it is for this very good reason the state society through its legal counsel can be a more effectual agent in suits to suppress this form of imposition on the public.

When a medical society undertakes to act for the public good, it deservedly commands respect and coöperation from public sentiment and esteem. A medical society should not exist for the mere intellectual and social self-interest of its members alone. There is a sphere of usefulness in impressing its influence on the public mind in various educational ways. The title of the presidential address of the American Medical Association, delivered at the fifty-ninth session: "A New Duty of the Medical Profession: The Education of the Public in Scientific Medicine," and more recently that of another address by Dr. M. Allen Starr, at the opening of the Medical Department of Columbia University: "The Duties of the Medical Profession to the Public," present convincingly such obligations.

Dr. Burrell, in his address outlines the objects of a medical society as follows: "First,—That individually its members may be better able to care for the sick. Second.—That they may collectively be better fitted to prevent disease. Third.—That they may know men and their ways and by social intercourse may live broader lives."

Besides the necessity for good organisation, harmony and individual enthusiasm for scientific progress, zeal for work is a prime factor. It is necessary that well defined plans should be conceived and assigned to appropriate committees in order to achieve that success which, at the expiration of each year, the president of each county society may, with pride, recount in his valedictory. The individual member in a county society becomes a unit in the state and national bodies, and upon him is conferred all the privileges these great medical associations possess. He is elevated into the house of peers of the profession. There is something wrong with the man who today is not an equal with his brothers in this respect.

The principles of these great and honored organisations are to uplift every member they include. Every county officer would do well to read the article by Osler, quoted by Dr. J. Riddle Goffe in his address delivered October 17, 1905, on "Organisation the Watchword of Creation." "In too many towns and smaller communities miserable factions prevail and bickerings and jealousies mar the dignity and usefulness of the profession. So far as my observation goes the fault lies with the older men. The young fellow, if handled aright and made to feel that he is welcomed and not regarded as an intruder to be shunned, is only too ready to hold out the hand of fellowship.

"The society comes in here as professional cement. The meetings in a friendly, social way lead to a free and open discussion of differences in a spirit that refuses to recognise differences of opinion on non-essentials of life as a cause of personal animosity or ill feeling. An attitude of mind habitually friendly, more particularly to the young man, even though you feel him to be the David to whom your kingdom may fall—a little of the old fashioned courtesy which makes a man shrink from wounding the feelings of a brother practitioner,—in honor preferring one another; with such a spirit abroad in the society and among its older men, there is no room for envy, hatred, malice or any uncharitableness. It is the confounded tales of patients that so often set us by the ears, but if a man makes it a rule never, under any circumstances to believe a story told by a patient to the detriment of a fellow practitioner, even if he knows it to be true, though the measure he meets may not be measured to him again, he will have the satisfaction of knowing that he has closed the ears of his soul to ninety-nine lies, and to have missed the hundredth truth will not hurt him. Most of the quarrels of doctors are about non-essentials, miserable trifles and annoyances—the pin-pricks of practice, which would sometimes try the patience of Job. But the good fellowship and friendly intercourse of the medical society should reduce these to minimums."

The short comings in the medical profession are by no means confined to "the many towns and smaller communities" of Dr. Osler's picture. The good feelings between doctors occasionally is marred by inconsiderate remarks at public clinics,—sometimes in the presence or hearing of the patients. It is not an uncommon thing for a doctor's patient to surreptitiously hie himself off to a clinic for various personal reasons, often with ulterior motives. They go without a card or letter of the attending doctor, and rarely intimate their intentions. They relate their case in prejudiced misstatement or evasions, often to the attending physician's detriment, and gloat over any criticism they chance to hear concerning their former treatment or diagnosis.

They frequently have been influenced by busybody friends and as the service they receive is free, they grossly abuse the privilege of charitable institutions. When these cases present themselves in this way no exceptions would be entertained if they were postponed to another clinic day, in the meantime the attending physician to be communicated with to ascertain all available facts concerning their cases. By such a course there could never exist any reason for hard feelings between the physicians in attendance and the clinician; on the contrary they would be enduring friends, avoiding an everlasting boycott of each other and mutually exchanging professional references in the future; at the same time disarming a patient wavering in his confidence in his doctor, who before wished to hear something that would possibly seriously injure his practice.

Medical societies should discourage the formation of medical cliques. It is not uncommon for a few men to band together for the purpose of controlling the society, or dominating the management of a local institution for ulterior or selfish motives. "Close communions" are well estimated in their purposes by the public sooner or later. It brings well merited reflection to those comprising them, but the incidental effects upon the institution or society with which they are officially associated are unfortunately such as to alienate the public support. These unprofessional methods smack loudly of the trust spirit of commercialism wherever they exist.

A languishing medical society should energetically investigate the causes for its conditions. A live thriving society is a most profitable and stimulating source of energy, of social and professional uplift to its members, but needs new leaven occasionally. A careful and searching diagnosis for its ills should be instituted and the cause removed. "Expectant treatment," is not appropriate in bringing back a healthful state. The means adopted should be combined vigorous, internal and external treatment as the ill-

ness may be in its terminal stages. The strict following of well conceived details, carefully outlined by the consultants, as the best course to follow in achieving the most promising results should be consistently adhered to with good nursing, the proper social nourishment,—plenty of fresh air not over-heated,—and vigorous stimulation by energetic spirits.

A county medical society aspiring to the objects quoted from the address of the president of the American medical association, must take heed to the voices of the times. It should take the initiative in each community in matters that present themselves regarding public health and the problems of sanitation. We have our canal zones and our New Orleans cesspools at our doors.

While the echoes of the recent International Congress of Tuberculosis sounding the knells of 200,000 deaths annually from a preventable disease, what is being accomplished to lessen this scourge of the white plague outside of a few large cities?

The infant mortality (Graham, Ch. Ad. Sec. Dis. of Ch.—A. M. A.), under five years of age per thousand according to the last census of the United States, is as follows: Michigan, 121.3; Connecticut, 156.8; New York, 159.8; Massachusetts, 177.8; District of Columbia, 274.5. Are these mortality figures not sufficiently appalling to stir up to activity in preventing the slaughter of the innocents? The principal cause for this high death rate is so well understood and can be so efficiently prevented, that it becomes almost criminal for a community to allow conditions to exist which contribute to such a state of affairs. The poisons given these defenseless human beings in their food, cannot be laid to criminal intent, but through the ignorance of their own mothers.

What does an average mother know about the cause of "Cholera Infantum?" The term itself fails to convey any meaning to her mind. It is a heritage of the past. Medical ignorance is deep-rooted in the minds of most people and they tenaciously cling to old ideas and superstitions. Most mothers even today believe that it is essential for a baby to have loose bowels at dentition time, or in the "second summer." If many medical terms were revised and called by their proper names much useful information would be imparted to the public. The term "cholera infantum" should be supplanted by *acute milk poisoning*. This appeals to the mind and comprehension of the most ignorant. What mother would continue to give a known poison to her offspring already made ill by a suspected food, that she knows becomes so, because of the conditions under which it is procured, marketed, and kept?

This brings me to the subject already referred to: "A New Duty of the Medical Profession: The Education of the Public in Scientific Medicine." Medical societies have a duty to perform along these lines; their members should be sources of information concerning those things which pertain to the welfare of the public in relation to the everyday conditions that menace their health. Every mother who is feeding her baby artificially on cow's milk, or other food of which it is a part, should be told the danger of doing so while the child is suffering from a putrid diarrhea. A mother never suspects for one moment that the diarrhea from which the child is sick, is caused by the germs in the very food that has heretofore perfectly nourished her baby. She has no conceptions that these germs which originally polluted the milk were some of the flora of the cow's intestinal contents, and got into the milk from particles of excreta adhering to the animal's body. She does not realise that such milk—originally pure—if allowed to remain for twenty four hours in a warm room, will contain more germs than sewage. (Chapin.)

It is our duty to instruct mothers, and the public generally, as opportunities occur with these facts, and also to advise them to patronise the dairyman who can show a clean bill of health—the man whose milk is certified that it has been produced under sanitary conditions and maintained at a temperature precluding the dangers from bacterial life. All this is possible by changed methods of the farmer, the dairyman and the dealer. The slight advance in cost consequent on the necessary care of the milk is so slight as compared to the benefits, that such a consideration should not be taken seriously into account.

Another sanitary problem confronting the public welfare is that of school hygiene. In a recent address by Dr. Thomas Darlington, Health Commissioner of the city of New York, at the eleventh annual conference of the Eastern Public Educational Associations on the "Medical Inspection of School Children in New York City," some very startling facts were adduced. "He said: "During the school year just ended 17 per cent. of the school children were excluded from attendance for varying periods of time for contagious diseases, and out of 141,908 children examined 108,320, or 76 per cent. were found to be suffering from non-contagious physical defects.

"Taking into account the time lost from school through illness, as well as acknowledging the inability of a physically defective child properly to assimilate his educational advantages, it is reasonable to assume that a large majority of these children failed of promotion because of their physical condition.

"In New York City alone (referring to the economic aspects of the question), I believe, the greater part of the \$6,000,000 spent for *one year's education* of children who failed to profit by it, could have been saved by the investment of one-twentieth of that sum in proper and systematic physical examination of the children."

I quote again from the suggestive address of Dr. Burrell in this connection: "When it is recognised and brought home to the public that contagious diseases in children are to a degree unnecessary, that by proper sanitation and medical school inspection they may be in a large measure prevented, then people will demand that their little ones in public schools shall be protected against disease, which often leaves them invalided and crippled for life. A child among the better classes today, until it begins to go to school, is usually free from contagious diseases, but the moment it enters a school it is subjected to dangers from infection which it rarely escapes."

The examination of school children in districts outside the larger cities has not as yet been taken up in the state. Children residing in small towns or in the country are possessed of these same physical defects as city children,—perhaps not in so large a ratio. They have many exposures to contagious diseases in the school houses, which are generally most unhygienic, poorly cleaned and rarely ever disinfected. It is generally conceded that contagious diseases of childhood could be absolutely controlled were it not for the school house. These children should be as well cared for as those in cities. If any one will visit the crowded tenement districts of New York city and compare the school children of today with those of an older generation, he will be struck by the healthful and symmetrical faces of the former, in marked contrast to the deformed and sickly physiognomies of the latter as met on the streets. The visitor will also appreciate what this medical work among the neglected school children is accomplishing. If these measures are adding to the efficiency of school life, how much more is it going to count in fitting these same citizens for the broader fields of usefulness in the after activities of business careers where the voice, the hearing, and the eyesight are called into excessive use daily by the exigencies of our modern civilisation. The saving of life from pulmonary, throat, ear and eye diseases, and conservation of nervous systems, consequent upon neglect of these important organs in early life, is beyond computing at this time.

A word about venereal diseases. Gonorrhea, next to measles, is stated to be the most prevalent malady of civilised countries. It is estimated that from 75 per cent. to 90 per cent. of all males

have been infected. It is the cause of 50 per cent. to 65 per cent. of all capital operations in public hospitals on women; and is the one factor of sterility, due to the genital infection of female infants. It is the most difficult of all infectious, contagious diseases to control in infants and foundling hospitals, asylums and day nurseries, most of whose inmates become infected; and furnishes 30 per cent. of blindness in children and over 10 per cent. of all adults in asylums. The county medical society should take more interest in the questions which are constantly presented to municipal boards of health. There is the milk problem already referred to, our potable water supply, ice supply, pure foods and drinks, as well as the control of contagious diseases.

The municipal health boards as now constituted are a reproach to our intelligence. They belong to the past, are antedated in all their methods, and inefficient in all things they undertake to perform. They are usually composed of political appointees put there for kindergarten purposes for other political offices later on. The men filling the boards are rarely ever suited by experience or fitness to judge of sanitary questions. As an example: A health board, in a neighboring municipality to where I reside, refused to concur in recommendations made by a county milk commission for regulating the principal milk supply in the county, in spite of the well-known fact, that one milk producer alone had nine out of his eighteen cows destroyed by the State Agricultural Department, because of the presence of tuberculosis. The excuse advanced, by a supervisor of the county and a member of this health board, was that the regulations would impose a hardship on a poor man with one cow, who was using it as a means of support in bringing up a family.

This selfsame board of health is referred to in the monthly bulletin of the New York State Department of Health for August, on page 211 as follows: "One board of water commissioners entered complaint against the board of health of a neighboring community, which had given permits for drains of a row of houses into a gutter, which flows directly into a tributary of the stream from which the watter supply is drawn. And the same board included among its list of twenty-five violations, the maintenance of a cesspool near a tributary by the supervisors of the county jail."

Local county health boards do nothing in sanitary matters except on complaint, founded on facts that can be sworn to if necessary, and made in writing only. This must be investigated by the local health officer. In his inspection he is often informed that the party making the complaint has probably some personal grievance and is taking this means to satisfy resentment. The

health officer may be the family physician of the alleged persecuted party. His report may be biased. The action of the board depending upon the report before them defers action or compromises with one side or the other, according to their personal or political affiliations. As the Public Health law is now constituted, its defects and requirements preclude the better class of medical men accepting appointment as health officers, in many important localities.

Since I have been engaged in the preparation of this address, the September number of the monthly Bulletin of New York State Department of Health has appeared, with an editorial comment, part of which I wish to incorporate: "Some change in the cumbersome and obsolete method of procedure in local jurisdictions is much needed. An intelligent and capable health officer is often unable to get his board to act when his medical knowledge shows its necessity. Every local board of health must have been struck with the indefiniteness of the law governing its powers and duties, and its entire inability to do needed things for the protection of public health, by reason of lack of funds, and the vague provisions of the law, seemingly conferring upon them great power, but failing to specify how it can be used.

"The people of this state are, at last, fairly awake to the value and necessity of sanitary reforms, and they are demanding both from the department and from their local boards of health and health officers, effective action along many lines."

The remedy lies in making the rural boards of health as efficient as those of larger cities, and the methods and systems there in vogue could well be copied with such modification as local conditions require. The public are open to receive instruction in medical subjects.

The eagerness with which patent medicine advertisements are read by the masses well demonstrates this fact. For this reason, it is obvious why the president of the American medical association warns those who undertake the education of the public in this connection,—that we should be careful in our efforts to impart new truths that we should not convey error. Josh Billings said truly. "You better not know so much than to know so many things that ain't so."

A. D. ROCKWELL of New York has tried the effect of electricity in all its forms for the relief of neuritis without getting good results. With the use of phototherapy, he gets relief of pain dependent on congested and inflammatory conditions. He describes ten cases of neuritis treated by him by this method with marked relief, and in several with cure as a result.—*Medical Record*, November, 1907.

Results of Lumbar Anesthesia in Gynecological Operations.

By FREDERICH BRUNNER.

Assistant at Professor Amann's Gynecological Clinic at Munich.

(Translated and reprinted from *Monatsscher. f. Geburts. u. Gyn.* Bd. XXIV, Heft 5).

SPINAL anesthesia has been* for several years past carried out quite extensively, the reports of which are constantly being read. In January of this year, a review of this procedure from the surgical aspect appeared from Dr. Krecke. I will, therefore, that I may avoid repetition, be less exhaustive in my report on the result of lumbar anesthesia in gynecological operations at our clinic, which report I have made at the instigation of my chief, Professor Amann.

I may spare myself the subject of the technic of the puncture itself, for we always adhere strictly to the directions of Professor Bier. The height of the puncture was not always the same. In vaginal work, the site was chiefly between the third and fourth lumbar and also the fourth and fifth lumbar vertebra; while in laparotomies it was between the first and second or second and third. To anesthetise the site of the puncture itself seemed to us unnecessary, although advantageous in many cases to direct the ethyl chlorid spray on the site of the puncture, the white spot then formed also serving as a guide. After the injection, the patient is placed on her back with pelvis slightly elevated.

Almost immediately after injection the patient as a rule feels sensations of warmth, formication, numbness, and the like. These paresthesia symptoms tend to begin at the feet and extend upwards to the trunk. There soon arises a paralysis of painful sensibility to touch, heat and cold, while sensibility to touch, heat and cold, motility and reflexes is still preserved. The causes of the analgesia, according to Braun, are found in the action of the remedy upon the posterior nerve roots and portion of nerve trunks seated in the spinal canal. The influence of the anesthetic upon the sensory fibers is shown to be notably more intense than on the motor nerves, the latter being involved only in high degrees of local poisoning. The same may be said in respect to paralysis of the sensations of temperature and touch. The anesthetic mixes with the cerebrospinal fluid, spreads upward in the sac, becoming thereby more and more dilute, and paralyzes in succession the accessible root fibers until the dilution becomes too feeble to exert an anesthetic action.

A few words as to unpleasant collateral and after effects. Often we note anxiety, dyspnea, perspiration, trembling of limbs, convulsions, nausea and vomiting as collateral phenomena; while

sequelæ include headache, backache, vomiting, insomnia, anorexia and weakness. Tuffier saw rise of temperature in the majority of cases. Death has even resulted. Collateral disturbances depend chiefly on rapid ascent of the injected fluid to the medulla oblongata. Subsequent phenomena are due doubtless to meningeal irritation.

After Bier's discovery, spinal anesthesia became widely employed, but was given up after a relatively short time. The latter was due to the toxicity of the cocain originally employed. The resumption of spinal anesthesia was due to the introduction of substitutes for cocain which were much less toxic. A great advance also made when suprarenal preparations were combined with the anesthetic; the contraction of the bloodvessels thereby causing the retention of the latter near the point of injection.

The unpleasant collateral and after effects have become much milder, or are absent altogether. The substitutes for cocain are eucain, tropacocain, alypin, stovain and novocain. We have used the latter especially. We employed spinal anesthesia in thirty minor and major gynecological operations, including curettage, emptying uterus after abortion, enucleation and thermocautery in inoperable carcinomata, amputation of pointed condylomata on the labia majora and minora, vagina and crural folds, extirpation of suppurating Bartholini's glands, carcinoma of clitoris and vulva, colporrhaphy, amputation of portis, posterior colpotomy in pelori exudate, vaginal total extirpation, the Alexander-Adams operation, ventrofixation, abdominal hernia, ovarian cystoma, myoma and implantation of ureters.

The duration of anesthesia was not over 50 to 60 minutes. The setting in of analgesia varied from 2 to 15 minutes. In four cases with correct technic, failure occurred in the following conditions: curettage of a uterus with marked terminal stenosis; in vaginal total extirpation (two cases), in which opening of the peritoneum and traction on the uterus were very painful, requiring inhalation of a little chloroform to complete the operation; and finally ventrofixation. The first patient was very nervous, had long been under treatment and had often been cureted under general narcosis. It should not be deemed a failure when the operation is of such a character as to outlast the anesthetic effects (over an hour); here it is necessary to add the effects of a little ether or chloroform.

Intervention in the perineum and ostium vaginæ have always been satisfactory; and the same holds good as a rule for intervention in the uterus itself, although curettage at the tube angles of the uterus was felt unpleasantly in two cases. Dilatation of

the internal os, considered a painful procedure, was not felt. Krecke regards any intervention which necessitates traction on the peritoneum as almost always painful. We, however, performed the Alexander-Adams operation with opening of the peritoneal cavity and laparotomy (both transverse and longitudinal incisions) with painless results. Legar and others would go no higher than the umbilicus, but we had two successful cases in which the incision reached above the navel (large myoma and ventral hernia). Peritoneal adhesions were detached and intestinal sutures placed, all without the slightest pain.

As to collateral symptoms: in the majority of patients no general disturbance occurred. One felt discomfort, another brief nausea, a third felt pressure on the head, and the like, but severe collapse or other notable phenomena were absent. As for after effects, these seemed to me more common and intense. Only eight patients presented nothing of the sort. As a rule, there was headache, more or less severe; vomiting often co-existed at the outset, which sometimes did not begin until the following day and even later. Two patients vomited daily for a week. In about ten cases pains in the loins were complained of, which sometimes did not begin until the following day and even later. Two patients vomited daily for a week. In about ten cases pains in the loins were complained of, reaching sometimes as high as the neck. Once a certain rigidity of the neck was noted.

Now for a criticism of medullary anesthesia. It is certainly a great endowment to our technical ability. But is it always an advantage? Certainly not,—only in the individual case; for general narcosis does not as a rule present so great dangers and ill consequences. This is the testimony of a great number of operators, native and foreign. Narcosis is more certain, for spinal anesthesia sometimes fails completely, either from defective technic or because the desired anaesthesia does not follow. It is a part of weakness for the operator to resort to narcosis in cases where he has promised the patient that none would be used. Another factor which speaks none too well for medullary anesthesia, may be the neglect of disinfection of the patient,—a view especially expressed by Professor Amann. It is clear that the operator may cut short aseptic procedures, by reason of the relatively brief duration of the medullary anesthesia. Kocher also expresses scruples of this character in his textbook of Operative Surgery, published three years ago, in which he states that perfect anesthesia may be followed by a strikingly unfavorable course of healing. We do not know whether he still holds to this view, but as far as known he uses medullary anesthesia little or not at all. It may not be a matter of defective asepsis at all, however, but of

disturbances in local nutrition caused by the injection. Another point not to the credit of medullary anesthesia is this: the operator cannot proceed calmly with his intervention as long as he must hasten and hurry in order to complete his operation, before the anesthetic effect has worn off. It is also to be borne in mind that the psyche of the patient is essentially altered. Fully conscious, patients witness all the preparations of the operation, they hear all the directions given by the operator, they feel themselves strapped to the table,—circumstances which tend to give medullary anesthesia a cruel appearance.

How does this method stand in laparotomies,—operations which must so frequently be performed? Anesthesia is here successful as a rule and a moderate Trendelenburg posture is well borne. The pressure which forces intestinal loops into the operative field is extremely rare. One only was the insertion of the compress for covering the intestines rendered very difficult by the pressing of the patient. But a very troublesome disturbance sets in if a patient begins to retch and vomit, which happens often enough. Many vomit after general narcosis, but probably quite as many vomit sooner or later after medullary anesthesia.

We who practise gynecology, are in a high degree guided by results of palpation, and it seems very important to examine the patient before intervention, with the abdominal musculature relaxed. How interesting is it, then, to see our diagnosis straightway confirmed by operation! But with spinal analgesia the musculature does not notably relax, as I have convinced myself. I had opportunity once, indeed, to see a tumor, after spinal injection, become prominent to the view, which could not be seen before injection. This phenomenon, however, may have been due more to the position of the patient. Complete relaxation, by its absence, is a notable disadvantage for the gynecologist.

I am far from condemning spinal anesthesia, which in my opinion should be reserved for cases, in which general narcosis appears too risky. Again, the patient should be allowed to decide as to how she shall be anesthetised, for many have a dread of narcosis. But narcosis must be a necessity for all nervous and hysterical individuals. The old and weak tolerate spinal anesthesia well, and should be given the benefit of it. The combination of spinal anesthesia with morphin-scopolamin injections gave good results in two cases, but we know too little as yet for a judgment. Scopolamin, however, is not free from danger.

We have never as yet employed novocain in obstetrics, for puncture is rendered very difficult because of the abdominal and spinal anomalies of position in the lying-in woman. We may at least say that in gynecology novocain appears preferable to any other anesthetic.

The Adulteration of Food.

[*The Hospital*, December, 1908.]

FRAUD and adulteration are ugly words, and their ugliness is by no means diminished by their application to food and food products. Modern research has told us that the mind and the fancies of it have no insignificant influence upon the processes of digestion, and the fear of what we eat being adulterated may not only oppress our minds, but may equally hamper our digestions. That some hundreds of merchants, and some tens of chemists and food experts of several nations, should have spent a week at Geneva discussing both the existence and the possibility of the prevention of fraud in relation to food products is certainly evidence both of the existence of fraud in this branch of industry, and also of the extensiveness of the food areas implicated. A weight will, however, at once be lifted off the mind of the ordinary consumer when he learns that by far the greater part of the frauds discussed at Geneva do not essentially affect him.

The terms fraud and adulteration are by no means synonymous, for while adulteration is always fraud, fraud is not always adulteration. Fraud, at any rate so far as this last Congress was concerned, may exist and be practised by one section of the trade as against another; one section of the trade may produce an article which may infringe a description applied to it by another, and may in that sense be fraudulent, but not, so far as the consumer is concerned, adulterated. This kind of fraud does not interest us for the moment, and is dealt with in this country by the Merchandise Marks Act. The second variety of fraud is adulteration, and consists of supplying an article which may be said, from the actual point of view of the consumer, to masquerade under the name applied to it, and not to be of the quality and substance demanded. Adulteration clearly affects the consumer, and it is of general interest to note how the Congress at Geneva dealt with it. The method adopted was what may be termed the method of definitions; it defined pure food, and thus by exclusion assumed that it defined impure food. Since at least one reason, so far as France was concerned, for this Congress was the acquiring of information from the trade with regard to the working of the 1905 pure food law, this method is of interest.

The application of modern technology to the preparation of food products, a necessary result of the development of applied science, has given rise to many complications, and to the reconsideration of the whole question of adulteration. Different countries have endeavored to meet it in different ways, and for the most part by new so-called pure food laws. Unfortunately

in these laws and considerations two issues are often intermingled and confused—namely, the good of the consumer as an individual, and the general good of the trade or the nation, of which the consumer is a part. In other words, regulations intended essentially to protect certain industries or certain classes of industry, instead of having their object openly avowed, are covered by the euphonious shibboleth of the public health. Reasons purely economic are confounded with those purely hygienic. It is the object, and the perfectly justifiable object, of certain countries to restrict the importation of food; it is equally the object of certain members of the population to restrict the transportation of food from one part of a given country to another. This is best done honestly and openly, and not by designating home or locally produced food pure and imported or transported food impure.

English law, which naturally gives expression to the necessity for both the importation and the transportation of food, has very rarely descended to definitions. It has formulated and maintains two main principles with regard to food, both absolutely in the interest of the consumer—namely, that food must never, under any conditions, contain substances injurious to health, and that the bulk or weight of food must not be fraudulently added to, that is, increased with the object of diminishing the actual amount of food substance present.

The foods most especially concerned by the above considerations are butter, milk, cream, and cheese, products for the most part natural, but nevertheless necessarily undergoing some manipulation before reaching the consumer. It may here be mentioned that this actual word manipulation was freely admitted by the definers of pure food, and the manipulations to which pure food may be submitted without presumably becoming impure are to be considered and formulated upon a subsequent occasion. This really must follow because the term 'pure,' as applied to food, although an appetising, is not a particularly happy one. Pure, in the minds of most of us, implies the idea at any rate of a certain degree of uniformity. Pure milk should be milk the chemical composition of which should only vary within very narrow limits, and the same would apply to butter; unfortunately, this is only partially true, and hence the attribute of pure must demand the formulation of a standard purity, and some individual members of any given class of food can only be rendered pure by being artificially brought up or lowered down to this standard, or, in other words, by being first rendered impure. If, indeed, we take another view of the word pure as applied to food, and regard it as synonymous with natural, we are involved in

worse difficulties, for under these circumstances a buyer, without he is an expert would probably pay the same price for rich milk as for poor, both of which are in the real sense natural—*i.e.*, pure. When we come to consider a less natural product like butter, this terminology involves us in still greater difficulties. The English law has defined butter not pure butter, but commercial butter, and it is interesting to note, as Dr. Tunncliffe pointed out at the Congress, that the only definition of any food stuff ascribed to England—namely, that of butter—was quite incorrect. The English definition of butter defines the materials from which it shall be made, limits the quantity of water which it shall contain, and admits the addition of salt and a preservative not injurious to health. The tentative definition of pure butter adopted at the Congress defines the materials from which it shall be made, precludes the addition of salt or preservatives, and does not limit the amount of water. The price of butter in Paris is, roughly speaking, 1s. 8d. a pound; in London 1s. 2d. The object of France, as clearly defined by M. Ruau, the Minister of Agriculture, at the Congress, is to maintain a policy of protection, and the extent to which this definition of butter conduces to this end will be appreciated by those who know the ins and outs of the French butter trade.

A by-issue of considerable importance in this connection, and only touched upon by the Congress, is the question of the use of preservatives in food stuffs of all kinds, especially in those of a perishable nature. Chief among preservatives is boracic acid, the preservative generally used in preserved meats, butter, and sausages. This substance, provided it is added to originally sound food, certainly facilitates both the transportation of food from one part of a country to another, and also the importation of food from abroad, and also the keeping of food in a sound condition in the domestic larder, the hygienic condition of which often in crowded London leaves a good deal to be desired. In fact, this substance possesses the preservative power of salt without its salt taste, and it in this sense facilitates the supply of what the public demand—namely, a perishable article of food which is fresh, *i. e.*, not salt, and yet will keep. Whether all this good is to be obtained without any evil, this is not the place to discuss. The same applies to other preservative agents when used in other foods. The point to be emphasised here is that the issue considered should be a clear one, and that those countries or communities who wish to hinder, or, at any rate, not to further, the importation or transportation of food should not condemn any agency tending to help it for other reasons than the actual one in their minds. In other words, protection should not masquerade under the cloak of hygiene.

The definitions of the Congress, so far as more complicated food products were concerned—that is, products in which there is less of nature and more of art—were essentially imbued with the same “motif”: certainly they were not all framed in the direct hygienic interest of the consumer. They are, however, all interesting as showing how complicated are the interests involved in the manipulations and manufacture of food, and for this reason how insuperably difficult is the formulation of regulations likely to be in the real sense international.

Infusions of Digitalis in Heart Cases.

[*The Hospital*, December, 1908.]

THERE is a general consensus of opinion amongst those who have had most experience of the various preparations of digitalis that, although the tincture, particularly the physiologically standardised tincture, is very good indeed, the best results of digitalis action are afforded by the infusion. The difficulty is that the infusion will not keep for any length of time; it has therefore to be made up freshly at short intervals, and in country practice this means that the medical man needs to make it for himself. The following notes upon the effects of heat upon the infusion, the use of chloroform in preserving it for considerable periods, and the addition of carbonates for the same purpose, are points of practical importance. It must be assumed, of course, that the digitalis leaves have been carefully selected, gathered, and dried.

The usual method of preparing infusions is to heat to boiling-point and to keep simmering. Bokay considers it wrong to prepare infusions of digitalis by heating. The active glucoside in the leaves becomes partly decomposed when heated. The best way of making the infusion is to macerate the digitalis leaves in cold, or only moderately warm water for at least three hours. Some observers go so far as to say that the human stomach should extract the glucoside for itself, and that therefore the powdered digitalis leaves should be given as such as in the *pilula hydrargyri diuretica* of some hospital pharmacopeia.

When digitalis treatment is to be prolonged, and it is desired to employ the home-made infusion, it becomes a matter of importance to make the preparation keep good for as long as possible. Chloroform, like chloretone (acetone chloroform), has often been used for purposes of preservation, and it is found to answer fairly well in the case of digitalis infusions. The following recipe is one of Stepp's:—

R	Digitalis foliarum	3j.
	Aquam ad	℥j.
	Fiat infusum. Add chloroformi	5iiss.

A dessertspoonful of this may be given every two hours, or a larger dose at longer intervals, the dosage and its continuance being controlled by observations of the pulse, the urine, and so forth, as when the tincture is employed. The beneficial effects of the infusion are not likely to appear sooner than the third or fourth day, but in some cases they are remarkably good.

It has been suggested that a small quantity of sodium carbonate should be added to the infusion of digitalis in order to neutralise the vegetable acids it contains. The addition seems to lengthen the time during which the infusion will keep good without other preservative to several days. Locke's prescription is as follows:

R Infus. Fol. Digital. Titr... ʒiss. to Oj.
Sodii Carbonatis gr. j.

Sig. : A teaspoonful to be taken every three hours,

ABSTRACTS.

TREATMENT OF PUERPERAL ENDOMETRITIS.

PROF. E. C. DUDLEY writes in his *Principles and Practice of Gynecology* (Lea and Febiger, Philadelphia, 1908): The endometrium, after an irrigation with a 1:500 formalin solution or some other disinfectant, is swabbed out (using fresh gauze on the forceps), with a 10 per cent creolin solution or some other disinfectant, and then $\frac{1}{2}$ oz. of Credé's ointment of argentic colloidal introduced. Thereafter the uterus is not invaded unless some special indications arise.

A dram of Credé's ointment may be rubbed in thoroughly for twenty minutes each day over the back or abdomen. Intravenous injection of 15 grains of a 2 per cent. solution of argentic colloidal, once a day, is a recent and promising therapeutic resource.

In the treatment of general infections of the peritoneum after operations, Credé's ointment of argentic colloidal, one dram a day thoroughly rubbed in for two to twenty minutes, and intravenous injection of a 2 per cent. solution of argentic colloidal once a day in doses of 15 grains, are among the strongly recommended measures.

BROVALOL, A NEW VALERIC.

Writing from Grawitz's Division of the Municipal Hospital Charlottenburg-Westend, Berlin, Dr. Maeder (*Therap. Monatshefte*, October, 1908,) states that for almost a year, the division has experimented on a large scale with a new valeric. It is a chemical compound of bromine, borneol and valerian, and con-

tains 25.2 per cent. bromine, 48.3 per cent. borneol and 26.5 per cent. iso-valeric acid. The product is manufactured by the Schering Chemical Works and introduced in the United States, under the name of brovalol.

The remedy was used exclusively on patients with general nervous disturbances and proved to be a valuable sedative. The many complaints and difficulties of these patients,—mental and physical fatigue, insomnia, headache, etc.,—were in almost all cases decidedly benefited upon more or less long continued use. The remedy must be conceded to have a highly calmative, if not hypnotic action. In addition to its contents of bromine, brovalol has the material advantage of tasting much less disagreeably than the other valerics. It is distinguished by a mild taste and only a slight and aromatic odor. Because of this and of its tolerability, it was preferred by the patients to bornyval. Even large doses (single doses of 10 grams— $2\frac{1}{2}$ drams) were well borne, as animal experimentation showed.

TOPICS OF PUBLIC INTEREST.

State Board of Medical Examiners hold Court.

Medical Society of the County of New York Seeks to Revoke Licenses—Hearing Before a Committee of the State Board of Medical Examiners.

SIX physicians, convicted of various felonies and misdemeanors, were given a hearing Friday, December 18, 1908, before three members of the State Board of Medical Examiners in proceedings brought by the Medical Society of the County of New York for the revocation of their licenses. This action is the first to be brought under the medical law passed in 1907, and is likewise the first one that the County Medical Society has yet instituted in its 102 years of existence. These are the physicians placed on trial in the disbarment proceedings:

Dr. Moses Jackson, the former Coroner, found guilty of bribery on February 2, 1905, judgment on whom was suspended by Judge Foster. Jackson was registered to practise in the county in 1884.

Edward E. Conrad, convicted on April 8, 1904, before Recorder Goff of attempted abortion and sentenced to an indeterminate sentence of from one to two years in state prison. Conrad did his time. He was admitted to practise September 14, 1887, upon the presentation of a diploma from the Chaddock School of Medicine of Quincy, Ill., dated 1889, and indorsed by the Bellevue Hospital Medical College, September 14, of the same year.

Dr. Frank J. Dudenhausen, found guilty of practising under the assumed name of old Dr. Dale and sentenced as a second offender on May 27, 1908, to six years and five months in state prison. Dudenhausen is now out on bail pending an appeal. He was licensed by the Regents to practise in this State on April 15, 1893, and was registered in the county of New York in April, 1902.

Dr. Francis Gray Blinn, sentenced April 23, 1908, for attempted abortion. He is now serving from one to two years in Sing Sing. Blinn got his diploma from the Hahnemann Medical College of Chicago in 1885, and after receiving the indorsement of the New York Homeopathic Medical College and hospital, he was registered to practise in the county in 1890.

Dr. Rudolph Mielke, who worked for the Collins Medical Institute, was convicted of sending indecent literature through the mails and was fined \$50 by the Court of Special Sessions on July 18, 1907. Mielke was registered in 1880.

Dr. Robert Ormsby was fined \$100 by the Court of Special Sessions for selling drugs for criminal purposes. Ormsby was registered in 1880.

These six men are being prosecuted under Chapter 344, section 11, of the laws of 1907. This among other things provides that a practitioner "who is guilty of a crime or misdemeanor" may have his license to practise in the State revoked or his registration to practise in the county annulled or may suffer the double penalty at the option of the Regents. The first four named come under the jurisdiction of the old law, which prescribed this punishment only against those physicians guilty of a felony. While no physician is supposed to practise after he has been convicted of lawbreaking, it is very hard to prove that they do; whereas if their license be revoked or their registration annulled they may be punished for the mere attempt to set up in business again. For this reason the County Medical Society applied for the revocation of the licenses, so that if the six men should try to carry on their vocation any longer a case could be proved against them more easily.

The three members of the Board of Medical Examiners appointed to look into the County Medical Society's application for the revocation of licenses were Dr. William Warren Potter of Buffalo, Chairman; Dr. Lee H. Smith of Buffalo and Dr. Floyd M. Crandall of New York.

The committee met in the office of Dr. Maurice J. Lewi, secretary to the board. Frank B. Gilbert, chief of the law division of the State Department of Education, appeared as legal adviser to the committee. The county medical society was represented

by its counsel, Almuth C. Vandiver of the firm of Whitman & Vandiver of 32 Nassau street, New York. Dr. Augustus S. Downing assistant commissioner of education, was also present.

Most of the accused had little to offer in the way of defence. The only question of law that was raised was brought up by Philip Carpenter, who appeared for Jackson. Mr. Carpenter maintained that under the decision rendered in October by the Court of Appeals in the case of the People vs. Fabian, Jackson had not been convicted within the meaning of the law, as the sentence upon him had not yet been pronounced. He maintained therefore that the committee had no jurisdiction over his client.

Mr. Vandiver insisted that in the Fabian case, which was one of election frauds, the Appellate Division construed the word conviction strictly, as it was used in the State Constitution and in the election law, and that the decision does not therefore apply to Jackson's case, as the statute under consideration contemplates only the guilt of the accused. This is shown, he declared, by the wording of the law. Mr. Carpenter got thirty days to file his brief. The question involved in Jackson's case may be taken up to the Supreme Court of the United States.

Thomas S. Morgan obtained for his client, Dudenhausen, the assurance from the board that they would withhold their recommendation in this case till January, when Dudenhausen's application for a retrial will be argued. Dudenhausen is now out on a certificate of reasonable doubt.

Decision in Blinn's case will also be withheld till the February term of the Appellate Division, when, as Amos H. Stevens, Blinn's attorney, told the committee, argument on an appeal will be made.

Mielke was defended by Dudley Field Maloney, representing George Gordon Battle, and by George A. Knoblock, representing John J. Vause. Mielke's counsel took exception to the presence of Dr. Crandall on the committee, on the ground that he was a member of the County Medical Society, at whose instance the prosecution was begun. The objection was overruled. Then they asked for an adjournment, which was denied. The defence, however, was given an opportunity to submit an application to be permitted to present oral testimony to the board. Mielke pleaded guilty when he was on trial in 1907.

Conrad was represented by Judge W. M. K. Olcott, who asked postponement of action, pending application to the governor for pardon. Granted.

The committee will probably not make its findings known much before next March, as the Regents do not meet until then.

The Regents will take final action on the findings and recommendations of the committee. The accused may either have their registration annulled, their license revoked, or may be suspended from practice. If their license is revoked, they may apply again after a year for its renewal.

Dr. H. W. Wiley Visits Buffalo.

The author of the Pure Food and Drug Law on building a conscience—Average business-man was defective in this regard before pure food law, says Dr. Wiley Concerning Food—No such thing as Brain Foods or Nerve Foods, declares the Federal Expert.

DR. H. W. WILEY, chief of the bureau of chemistry in the Department of Agriculture, who was in a sense, the author of the national pure food and drug law, spoke before the Westminster Club on Tuesday evening, December 8, 1908. He rather opened the eyes of Buffalonians on what the pure food and drug law is doing.

The conscience of the average American business man, said Dr. Wiley, isn't just calloused or seared—it's a minus quantity. But we have discovered a conscience builder. The average business men can build up a conscience on the strength of a few fines in the federal courts. Conscience can be made to sprout, and we're sprouting a few every day.

Don't be misled by foodists. Some claim one kind of food is the best and others, another. There is no such thing as a brain food, or a nerve food or a skin food. Because one dealer advertised a certain article as brain food, a federal judge handed him the limit of a sentence. I was put on the stand in that investigation as an expert. When asked if the article would not nourish the brain, I responded that it would also act as a great stimulus to the big toe.

So don't be misled by brain foods. You won't get mentally strong by eating brain foods, though you may get dyspepsia.

The national pure food law when passed was thought by Congress to be a joke; it hasn't proved so. Out of 200 cases we have tried, we have convicted all but two, so if a man gets the pure food inspectors after him he can figure his chances at about 1 to 100.

The pure food law has two evils to remedy: false representation of the nature of the substance (i.e. misleading), and debased or adulterated articles. The law applies to foods, drink and drugs for men as well as animals.

Under the pure food law you can't feed Fido adulterated food; you can't feed birdie seeds that are poisonous or we'll be after you.

Those who fought the measure the hardest are now its strongest supporters. American made wines with French labels are by-

goners; maple sugar that isn't—isn't now, unless it says so on the sugar. It's a guarantee of American goods and is overriding the idea that 'the American people love to be humbugged.'

Dr. Wiley was entertained at luncheon the afternoon before the lecture, at the plant of the Shredded Wheat Company at Niagara Falls. Among those present were, Dr. Samuel Van Vranken Holmes, Dr. Hamilton W. Benham, Dr. F. Whitehill Hinkel, George R. Howard, Loran L. Lewis, Jr., and S. N. McWilliams of Buffalo, and president A. J. Porter, general manager M. B. Butler; secretary, H. W. McBean and F. A. DeWeese, director of publicity of the Shredded Wheat Company.

The Fight Against Consumption.

Buffalo enlisted for the war against Consumption—Fight against the White Plague will be carried on with greater vigor—Two hospitals necessary—One for Contagious Diseases and one for Tuberculosis are equally needed.

STEPS were taken December 10, 1908, at a largely attended meeting of representatives of the various charitable and relief associations of the city to form what will be known as the Buffalo Association for the Relief and Control of Tuberculosis. The meeting was held at the Hotel Iroquois with Dr. Matthew D. Mann as chairman and Irving S. Underhill secretary of the meeting.

Among those present were the Mayor, J. N. Adam, Dr. De Lancey Rochester, Dr. John H. Pryor, the Reverend Cameron J. Davis, the Reverend Robert Freeman, Walter L. Brown, Dr. Francis E. Fronczak, Frederic Almy, Hugh Kennedy, Ansley Wilcox, Dr. F. Park Lewis and Dr. Gustav A. Pohl. There were also about a score of the city's philanthropic women at the meeting.

MUST ISOLATE KNOWN CASES.

At the outset, Dr. Pryor stated briefly the object of the gathering. He said that last year 554 persons died of tuberculosis in this city. "It has been found," continued Dr. Pryor, "that there are five times as many cases of consumption as there are deaths. Therefore, multiplying 554 by five, we have 2,770 people suffering today in their homes with this disease and infecting others because Buffalo has no facilities for isolating those afflicted with the malady. There are but 60 beds for consumptives in this city. Experience has shown that the only way to fight tuberculosis is on a large scale. We need a municipal hospital for tuberculosis, and the purpose of this new association is to promote that end."

Mr. Ansley Wilcox then expressed his sympathy with the aims of the proposed association and his belief that both a contagious disease and a tuberculosis hospital should be established in this city. The chairman then called for a vote on the question: Shall the chairman be given authority to name a committee of fifteen to consider the organisation of an association to fight tuberculosis? the committee to report at a future meeting. This was carried by a viva voce vote. Later, an amendment to the effect that the committee have power to add to their number was also carried.

TWO HOSPITALS NEEDED.

Another action taken by the meeting will, doubtless, create much favorable comment. Dr. Pryor asked that the meeting go on record as in favor, not alone of a hospital for the treatment of tuberculosis, but also of a municipal hospital for contagious diseases. Dr. De Lancey Rochester, in seconding the motion, expressed his pleasure that such action would forever quash the rumor that those in favor of the tuberculosis hospital were either against or apathetic toward the movement for a hospital for contagious diseases. "We need not only one, but both, hospitals," declared Dr. Rochester.

Secretary Underhill read a list of the organisations which had been asked to send delegates to yesterday's meeting, numbering nearly twenty of various kinds,—religious, medical, social, musical, business and philanthropic.

THE FIGHT IN NEW YORK CITY.

New York City is already stirred up in a fight against tuberculosis. Observers say it is the greatest crusade waged in the history of the nation. There are church mass meetings, labor mass meetings, social workers' mass meetings and nurses' meetings, and on a recent Sunday, every clergyman in New York was asked to say something from his pulpit about the battle for the consumptive.

At the outset of the conference being held in the American Museum of Natural History, \$60,000 was raised to pay for installing the tuberculosis exhibit brought from the international congress recently held in Washington. This exhibit, which fills the museum, includes all states in this country and the foreign countries of Europe.

About 40,000 posters giving facts about tuberculosis have been printed. One of the large posters states that every three minutes someone dies from consumption in the United States; that 10,000 people died in New York last year from the disease, and that 16 567 persons died in the last year in this state.

In all the surface, subway and elevated cars in New York, a card with this motto has been placed:

We must care for the consumptive in the right place, in the right way and at the right time until he is well. Not in the wrong place, in the wrong way and at the wrong time until he is dead.

Record crowds have been visiting the great tuberculosis exhibit in the American Museum of Natural History. During the first six days of the conference 140,000 people visited it. The climax was reached Sunday, December 6, when 40,000 people were admitted to the museum between 1 and 5 o'clock. So great was the crush, that the police reserves had to be called out.

Monday, December 21, was known as New York State day. It was held under the auspices of the State Charities Aid Association and the New York State department of health. Among the speakers on that occasion were Dr. Herman M. Biggs, Dr. Eugene H. Porter, State Commissioner of Health, John Williams and Dr. John H. Pryor of Buffalo.

CORRESPONDENCE.

Prevention of abuse in animal experimentation.—Chairman Van Fleet of the committee on legislation and Chairman Bryant and Secretary Curtis of the Committee on experimental medicine, of the Medical Society of the State of New York, unite in an appeal on behalf of their Committees, to physicians throughout the state to oppose legislation restricting proper animal experimentation and particularly the bill proposed by the so-called society for the prevention of abuse in animal experimentation.

Editor Buffalo Medical Journal:

SIR.—Will you kindly insert the enclosed in the next issue of your JOURNAL, and oblige?

Yours very truly,

(Signed)

FRANK VAN FLEET,
JOSEPH D. BRYANT,
JOHN G. CURTIS.

MEDICAL SOCIETY OF THE STATE OF NEW YORK.

17 West 43d Street, New York City,
December 2, 1903.

To the Practitioners of Medicine of the State of New York:

The society for the Prevention of Abuse in Animal Experimentation last year caused to be introduced into the legislature of this state a bill, seriously restricting experiments on living

animals. The above named society now enters the field again and proposes another bill of the same general character as that of last year. The Medical Society of the State, through its committees on legislation and experimental medicine, successfully opposed the passage of last year's measure. Acting under the resolution referring to animal experimentation, which was passed at the last annual meeting of the State Society, its committees on legislation and experimental medicine will oppose the passage of the proposed bill. We therefore urge all members of the medical profession to disapprove the measure and on its introduction into the Legislature, to work in all legitimate ways for its defeat. Specific objections to it will be presented later.

(Signed)

FRANK VAN FLEET,
Chairman of the Committee on Legislation.

JOSEPH D. BRYANT,
Chairman of the Committee on Experimental Medicine.

JOHN G. CURTIS,
Secretary of the Committee on Experimental Medicine.

**Council on Defense of Medical Research of the American Medical Association
invokes the aid of medical journals in its efforts to prevent or overcome
hostile public opinion—Letter of Dr. W. B. Cannon, Chairman.**

Editor Buffalo Medical Journal:

SIR:—The Council on Defense of Medical Research of the American Medical Association is desirous of obviating, as completely as possible, any cause for complaint against animal experimentation. Much of the "evidence" cited by hostile agitators is taken from articles in journals devoted to the medical sciences. Instances are frequently cited in which it is stated that, as there is no mention of anesthetics, the work must have been done without anesthesia.

Will you not aid the Council in its efforts by very careful examination of articles submitted to you for publication, with especial reference to the use of words likely to cause misapprehension regarding the experience of the animals used for research? And in every instance in which anesthesia is a condition in the investigation, will you not point out to authors the importance of making that fact prominent? We hope that by the coöperation of all who are interested in the promotion of medical science, the development of a public opinion hostile to medical research may be checked and that there may be a growth of popular understanding of the aims, the methods, and the significance of the results of animal experimentation.

Yours sincerely,

WALTER B. CANNON,
Chairman.

Boston, December 1, 1908.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

All communications, whether of a literary or business nature, books for review and exchanges, should be addressed to the editor, 238 DELAWARE AVENUE, BUFFALO, N. Y.

VOL. LXIV.

JANUARY, 1909.

No. 6

Dr. Roswell Park's Anniversary.

DR. Roswell Park was the guest of honor at a banquet tendered him by the medical profession at the Iroquois Hotel, on the evening of December 7, 1908, in commemoration of his twenty-five years' professorship of surgery at the University of Buffalo.

The committee in charge of the arrangements, Drs. Charles G. Stockton, Charles Cary, M. D. Mann, Eugene A. Smith and H. U. Williams, of which committee Dr. E. R. McGuire, was treasurer, issued invitations to the profession to participate in honoring Dr. Park, and invited some of the prominent surgeons of the United States to be its guests. From other cities came Dr. Frank Billings, and Dr. L. S. McArthur, and Dr. Arthur D. Bevan, of Chicago; Dr. James Bell, of Montreal; Dr. George W. Crile, of Cleveland; Dr. F. S. Dennis, of New York; and Maurice H. Richardson, of Boston.

Covers were laid for 150 in the large banquet hall of the Iroquois Hotel and the dinner was served at 7.30. The arrangements were perfect and no large dinner has been given in Buffalo in recent years, which has compared with this one in point of excellence, simplicity and artistic detail.

The subscribers to the dinner were seated at small tables, at which the general decorative color scheme was carried out.

The dinner cards, exquisitely designed, were most admirably executed specimens of typographic art. The covers were of heavy plate paper of golden brown, the front bearing an engraved vignette portrait of Dr. Park, enclosed in an oval, embossed in silver. The menu and toast list were on thin hand-laid paper of the same tone. The dinner was most carefully selected and was unusual, in that there was an entire absence of those conventional

dishes, which find place on the dinner cards of nearly every large banquet. The menu was :

	Canapé de Caviare	R. P. Cocktail
	Huitres sur Coquille	
	Consommé Printanier Royale	Cabinet Sherry
Celeri	Olives	St. Estephe
	Amandes Salees	Sauterne
	Chair de Crabes, à la Newburg	
	Ris-de-Veau scus Cloche Eugénie	
	Sorbet Bénédictine	R. P. Cigarettes
	Suprême de Mallard, à l'Orange	Louis Roederer, 1900
	Asperge de California, Vinaigrette	
	Pouding de prunes Glacé	Whiskey
	Petits Fours	White Rock
	Fromage Camembert	
	Café Noir	Cigars

The cigarettes were silver tipped and bore Dr. Park's monogram in silver with the date 1883 and 1908.

The opposite page carried the toast list, remarkable in its display of careful selection of appropriate quotations.

This will last out a night in Russia when nights are longest—Measure for measure. These are begot in the ventricles of memory, nourished in the womb of pia mater, and delivered upon the mellowing of occasion.—*Love's Labor Lost*.

TOASTS.

"O, a little bit of history, a letter and a jug."—Old Song.

Introduction Dr. Charles Cary

C. "Here's my hand."

P. "And mine with my heart in't."—The Tempest.

Response Dr. Roswell Park

"You were in presence then and you can witness with me this is true."—Richard II.

Dr. Park in Chicago Dr. Frank Billings

"And gladly wolde he lerne and gladly teche."—Chaucer

Dr. Park, the Teacher Dr. Eugene A. Smith

"This is an art which does not mend nature. Change it, rather; art itself is nature—so it is."—Winter's Tale.

Dr. Park the Surgeon Dr. Frederick S. Dennis

"Knowing I loved my books, he furnished me from mine own library with volumes that I prize above my dukedom."—The Tempest.

Dr. Park the Author Dr. Matthew D. Mann

"If he be not fellow with the best king, thou shalt find the best king of good fellows."—Henry V.

Dr. Park the Citizen Mr. Henry R. Howland

"Give me some wine; fill full. I drink to the general
joy o' the whole table."—Macbeth.

..... Dr. Charles G. Stockton.

"These fellows will do well."—2 Henry IV.

The fact that there was no stated toast for Dr. Stockton was commented upon, and yet it was no surprise when the speaker, in responding to the unnamed toast turned to Dr. Park, and in a gracefully worded speech presented him with a magnificent silver ewer of ancient pattern appropriately inscribed. That this presentation was a surprise to the guest of honor, was apparent in his expressions of thanks and appreciation.

Dr. Charles Cary was toastmaster and in presenting Dr. Park, he lightly and almost blithely reviewed the years which have passed since Dr. Park came to Buffalo. He delved into bits of personal history and intimacies in a fanciful way and at the conclusion of his speech, during which he had aroused all the good humor and enthusiasm in the crowded room, he formally presented Dr. Park.

There have been banquets held in Buffalo and elsewhere where there have been more noisy demonstrations; but it is doubtful if there has ever been seen in this city such a demonstration of affectionate regard for a man in private life, as was accorded Dr. Park, when he arose to respond to the greeting of the toastmaster. Everybody in the room was on his feet, napkins were waved in billowing clouds and the clapping of hands was followed by cheers of welcome; not the hysteric cheers or the enthused applause which greets the oratoric hypnotist or the meteoric public figure of fickle fancy. It was none of this; it was a spontaneous outburst of genuine good-will and friendship for a man who by his works and his deeds and his personality, has won the esteem and the love of his fellow workers. Dr. Park's response was one of simplicity, highly characteristic of the man. His words of thanks and appreciation were expressed in simple language and with deep feeling; he reviewed his work in Buffalo and sketched the changes which had taken place in the twenty-five years of his residence here; the marvelous changes, the great advancement which had taken place in surgery and in hospital equipment; he told of the disadvantages under which surgery was performed twenty-five years ago and how, through the generosity of several public-spirited Buffalonians, it had been possible for the Buffalo General Hospital to have one of the finest clinics in this country, and the University of Buffalo to possess

a perfectly equipped laboratory for experimental and research work.

Dr. Mann's address dealt with Dr. Park's position in literature and he reviewed in detail the books and the many important monographs which he had contributed to the literature of surgery and medicine.

Dr. Billings's speech was of a more intimate character, for it took his hearers back to the days in Chicago, when modern American surgery was in its earliest stages. He spoke at length of Dr. Park's career in that city, and of the loss which Chicago had sustained when he came to Buffalo to assume the professorship of surgery. There was, at that time, he said, a place for a man in surgery, and it mattered not whether he were in Chicago or Buffalo or any other city; there was one man to occupy that place and that man was Dr. Park.

Dr. Eugene A. Smith's reply to the toast "Dr. Park as a teacher" was gracefully eulogistic. Mr. Howland in speaking of Dr. Park, the citizen, sketched the civic life of the guest of honor and recited the positions he had occupied aside from his professional life, and paid him a well deserved compliment for his interest in matters which bended to the civil and social well-being of the city. Drs. Bevan, Bell and McArthur and Richardson also spoke.

An unexpected addition to the toast list was the introduction of Mr. Gordon Hayd, a member of the senior class in the medical department of the University of Buffalo who, on behalf of his classmates, presented Dr. Park with a silver set in an address, which was excellently phrased and expressive of the affection of the students for their professor of surgery.

During the dinner Dr. James J. Mooney and Dr. Fred C. Busch sang, accompanied by Dr. Prescott LeBreton. One of Dr. Busch's numbers was "A Fragment," composed by Dr. Park.

The dinner was a most graceful tribute to a great man and fittingly commemorated the close of his twenty-five years of labor as a teacher of surgery at the University of Buffalo.

Dr. Dennis in speaking of Dr. Park, the surgeon, paid tribute to the work he had performed and the high position he occupies in both this country and Europe.

THE State of New York is making a strong fight against the inroads of tuberculosis. New York State day December 21, at the international exhibition in New York city was a great success. Speakers from various points told of the progress making in their several localities.

The speaker from Buffalo was Dr. John H. Pryor, who summarised the Buffalo situation thus:

Buffalo lacks two paramount requisites which are necessary in a campaign against tuberculosis. There is no provision for institutional care of the early case, and has practically no reporting of those afflicted until dead. Tuberculosis is not attacked as an infectious disease, and thus far the sufferers are not treated as afflicted human beings. We cannot reach, help and control until the consumptive is located, and I do not believe that prevention, unless associated with common sense relief, will ever be successful. Our vaunted knowledge of the cause, mode of care and control becomes manifest largely through a flux of garrulity and an occasional tap with a tack hammer in the dark.

The results are appalling, and the people know it. The usual dose of statistics has been administered. It might be mentioned casually that the saving of life is a well known method of reducing a disgraceful death rate. Experience and reflection strengthen the belief that we must find the recent recruit, remove him from the ghastly procession and supply intelligent relief and prevention when it may be effective. We have an association, a day camp, a dispensary and a class system, and we touch a fringe. The vast majority of consumptives die because they are poor.

When we decide to be frank, and tell the whole truth, the people may take a holiday and do something about tuberculosis. They may have to be guided by the medical profession to avoid a panic due to a confusion of ideas, and the multiplicity of beguiling and quaint theories so abundant at present. The size of the problem is no excuse, but the timid no longer belong in the fight. They can trot along behind and yelp about ethics and conservatism. The men to enlist are those who are tired of the frightful ravages of disease and the unnecessary death rattle in the consumptive's throat. They may be ugly enough to tell a community how cruel and inhuman it has been to the consumptive, while it has helped all other dependent sick. I insist that the public has not been taught all the facts.

CALOX, the oxygen tooth powder continues to grow in favor with the two professions,—medicine and dentistry. The reason is not difficult of solution. The combination of lime and oxygen in this form assures the most perfect cleanliness of mouth and teeth, destroying pathogenic germs, preventing decay, and rendering dentures germ proof. Calox should be found not only in the family of every physician and dentist, but in every lay family of refinement.

THE Moët & Chandon White Seal very dry champagne should be prescribed by physicians wherever such medicine is needed. Its delicate flavor makes it agreeable to sensitive palates and when

mixed with Apollinaris, is tolerated by the most irritable stomach. Moreover, it is a wine that should find its way to every table whenever champagne is served.

APOLLINARIS, now as always the queen of table waters, is one of the features of the sick room which should not be overlooked. We esteem it the best carbonated water for the invalid that has yet been offered. Besides being a palatable beverage it furnishes a useful vehicle for many potions or draughts. Apenta is a very useful laxative that should be appealed to whenever such water is needed.

PERSONAL.

DR. EDWARD N. BRUSH, formerly of Buffalo and one time editor of this JOURNAL, now superintendent of the Sheppard and Enoch Pratt Hospital, Baltimore, was tendered a dinner in the latter city, December 11, 1908. The purpose of the participants was to express their personal regard for Dr. Brush, and their appreciation of the great service he has rendered in the care of the insane, during the past thirty years. The dinner was attended by nearly a hundred physicians and friends and was a conspicuous success.

DR. A. L. BENEDICT, of Buffalo, whose specialty is diseases of the digestive organs, has removed to the Hotel Raleigh, 354 Franklin Street. Hours, until one, and by appointment. Telephones: Bell, Tupper 320. Frontier, 720—10193.

DR. ARTHUR G. BENNETT, of Buffalo, and not Dr. Alice Bennett as the JOURNAL announced in its November issue, has been appointed to the attending staff of the German Deaconess's Hospital. The error is to be regretted, and we attempt to make amends by this announcement, even though it is somewhat belated.

DR. DEWITT G. WILCOX, formerly of Buffalo, where he resided for 22 years, has removed to Boston, which becomes his residence for the future. He will be associated with Dr. N. W. Emerson, in the conduct of the Emerson Hospital, and also becomes associate in the chair of gynecology at the Boston University. The many friends of Dr. Wilcox in Buffalo and Western New York, will deeply regret his departure.

DR. RENWICK R. ROSS, who for sixteen years has been superintendent of Buffalo General Hospital, recently received an invitation to take similar charge of Bellevue and allied hospitals at

New York. After considering the matter with its advance in salary, Dr. Ross declined the appointment, preferring his present field of duty.

OBITUARY

DR. JOHN I. WHEELER died at his home, Chatham, N. Y., December 3, 1908, in the prime of his usefulness at the age of 58, after an abrupt and brief illness from pneumonia. He was at the time of his death, Director of the Division of Communicable Diseases of the Department of Health; a vice-president of the State Medical Society; a member of various professional and civic organisations. For nearly thirty years he had been a Trustee of Public Schools, and the admirable buildings and system of school and library of his village are a monument most prized by him of devoted work in this direction. He was a good physician with wide practice in the country about him; he was much sought as an adviser and leader in professional work by his associates; he had technical capacity and wise judgment, with a pleasing manner and address, and with a good heart for everyone. He was a rare man who had done good work in a good hearted way and his death leaves a large gap. The day of his death, all work ceased in the village and there was a great gathering from far and near to pay him a last tribute.

DR. EBER S. CARLISLE, of Los Angeles, Cal., died at his home in that city, December 8, 1908, aged 65 years. He graduated at the University of Buffalo in 1868.

DR. DAVID C. EISBEIN, of Buffalo, died at his home in this city, December 24, 1908, aged 64 years. He had been for many years a well known physician on the east side of the city, and with his wife spent a portion of last summer and autumn in European travel. He graduated at the University of Buffalo in 1878.

SOCIETY MEETINGS.

THE Medical Society of the State of New York will hold its 103d annual meeting at Albany, January 25-27, 1909, under the presidency of Dr. Arthur G. Root, of Albany.

THE Medical Society of the County of Erie held its 87th annual meeting December 21, 1908, under the presidency of Dr. Edward Clark. An interesting program was disposed of.

THE Buffalo Academy of Medicine held meetings during the month of December as follows:

Section on Surgery.—Regular meeting held Tuesday evening, December 1, 1908. Program: Symposium on fractures. (1) Use of the x-ray in fractures, W. W. Plummer; (2) The non-operative treatment of fractures, Frank J. Carr; (3) The operative treatment of fractures, Marshall Clinton; (4) Complications in treatment of fractures, Roswell Park. Discussion opened by Eugene A. Smith and Edgar R. McGuire.

Section on Medicine.—Regular meeting was held Tuesday evening, December 8, 1908. Program: A study of the effects of tedious labors and forceps deliveries in the production of epilepsy, spastic paralysis and idiocy, James W. Putnam. Discussion was opened by Dr P. W. Van Peyma from the obstetric standpoint and by Dr. Irving M. Snow from the pediatric standpoint.

Section of Obstetrics and Gynecology.—Regular meeting was held Tuesday evening, December 15, 1908. Program. (1) Manual dilatation of parturient canal, P. W. Van Peyma; (2) Education of women relative to diseases incident to menopause, De Witt G. Wilcox.

Section on Pathology.—A stated meeting of the Academy was held Tuesday evening, December 22, 1908. Program: Absorption from the peritoneal cavity, W. G. MacCallum, Associate Professor of Pathology and Curator of the Museum at Johns Hopkins University, Baltimore, Md. A meeting of the council was held at 8.15 p. m. A collation was served at the close of the meeting.

THE Rochester Academy of Medicine held meetings during the month of December at the Hotel Seneca, as follows:

Section on Surgery.—Regular meeting was held Wednesday evening, December 9, 1908. Program: (1) Deviations and spurs of the nasal septum and their removal by submucous resection, Nathan D. MacDowell. (2) Operative lateral sinus thrombosis, Bradford A. Richards.

Section on Obstetrics.—Regular meeting was held Wednesday evening, December 16, 1908. Program: Case reports of cesarean section William M. Brown. Discussion opened by Edward W. Mulligan.

BOOKS AND AUTHORS.

Diseases and Surgery of the Genitourinary System. By **Francis S. Watson**, M.D., Senior Visiting Surgeon to the Boston City Hospital, Lecturer on Genitourinary Surgery in the Harvard Medical School, Boston; and **John H. Cunningham, Jr.**, M.D., Assistant Visiting Surgeon to the Boston City Hospital. In two octavo volumes, containing 1,101 pages, with 454 engravings and 47 full-page colored plates, mostly from original drawings. Lea & Febiger, Publishers, Philadelphia and New York, 1908. (Price for the complete work: Extra cloth, \$12.00, net; half persian morocco, gilt tops, de luxe, \$17.00, net.)

Not until very recently has the study and practice of genitourinary diseases become established as a separate and distinct specialty. Particularly may this be affirmed regarding the surgical treatment of these diseases. This work in its two splendid volumes will be welcomed by the genitourinary specialist because, for the first time, is his specialty dealt with in type so comprehensively, so completely and, withal, so scientifically. But it serves notice on him that he can no longer be classed as a specialist unless he is prepared to do all the surgery of the genitourinary tract, from incising the meatus to extirpation of the kidney, from catheterisation to prostatectomy. In other words, the genitourinary specialist of today must, perforce, equip himself to meet every phase of the work, from the simplest therapeutic to the gravest surgical procedure. This is the work that teaches every detail of the topic, every minor point, as well as every major principle. It is valuable also to the general practitioner, especially he who must do everything in medicine and surgery that comes to him.

The anatomy of the genitourinary tract and its environment, is developed step by step, as the several regions are approached and as each operation is described. The authors, in addition to their own studies in the anatomy of the parts, have drawn upon Sobotta, Deaver, Testut, and others,—all men of great distinction in anatomical study and as teachers. Watson pays great compliment to Deaver, which is eminently deserved. Especially is this true with reference to Deaver's excellent work in operations on the prostate.

If the anatomic studies and delineations merit praise, what shall be said of the operative procedures and depictions themselves? Nowhere in the literature has anything appeared so complete, so clear, so understandable even to the novice, as in this treatise, not only as relates to its descriptive text, but in its drawings and illustrations in general. While it must be conceded that the treatise is very strong in all the major operations on the genitourinary tract, we have been impressed with the further fact that it deals masterfully with those operations which we are accustomed to call minor, such for example, as the surgery of the

prepuce, plastic operations on the penis, internal urethrotomy and division for the relief of stricture, and the like.

In describing the technic of many of these minor details, Watson is superb. He tells of the instruments needed and how to use them. We may cite, as an illustration, his description of passing the sound, which is so complete that even the tyro should not fail; and he supports the descriptive text with such perfection of pictures that one can almost imagine he is in the author's clinic, witnessing the demonstration on a real patient.

The first volume considers the external genitals, the prostate, and the bladder, contains 627 imperial octavo pages with 339 illustrations in the text, besides several plates. The second volume deals with the kidneys and ureters, contains 474 pages, with 115 illustrations in the text, and also many plates in color and half-tone, all constituting a treatise rich in scientific material and filled with the perfection of pictorial art.

Watson, the author-in-chief, has been engaged about seven years in the preparation of this work. After being occupied four years diligently, he foresaw that he would not be able to finish it without aid within the specified time, whereupon he called to his assistance John H. Cunningham, Jr., his former house surgeon, and these two together, master and pupil, have wrought out and presented to the profession an enduring contribution to the literature of medicine. The illustrations, profuse though they are, present a striking object lesson. They are realistic exhibitions of the conditions portrayed, many being original and all recent. The authors are fortunate in having such talented artists at command. The entire treatise is a monument to the skill and talent of American authors, artists, and publishers.

The Medical Record Visiting List or Physicians' Diary for the Year 1909. New and revised edition New York: William Wood & Company, Medical Publishers, 51 Fifth Avenue.

This book has been before the profession so long and in the hands of such a multitude of physicians each year, that nearly everybody interested is familiar with it. For the information of those unacquainted with its make-up, we invite attention to its table of contents:

Calendar; Estimation of the probable duration of pregnancy; Approximate equivalents of temperature, weight, capacity, measure, etc.; Maximum adult doses by the mouth, in apothecaries' and decimal measures; Drops in a fluid drachm; Solutions for subcutaneous injection; Solutions in water for atomisation and inhalation; Miscellaneous facts; Emergencies; Surgical antiseptics; Disinfection; Dentition; Table of signs; Visiting list with special memoranda; Consultation practice; Obstetric engagements; Record of obstetrical practice; Record of vaccination; Re-

gister of deaths; Nurses' addresses; Addresses of patients and others; Cash account.

The prices of regular lists are: for 60 patients a week, with or without dates, handsomely selected red or black, morocco binding, \$1.50; for 30 patients a week, with or without dates, same style, \$1.25; also a few special 90 patient lists, \$2.00.

These visiting lists are fitted into genuine seal and calf skin wallets, making the most elegant books of the kind ever offered to the profession. The lists proper are in two books of six months each, and are removable from the wallets. They are thus much less bulky for the pocket. They are also economical inasmuch as the leather covers may be made to do service for several years. We unhesitatingly recommend the Medical Record visiting list as one of the most useful, as well as among the handsomest offered in the market.

Diseases of Infancy and Childhood. By Louis Fischer, M.D., Attending Physician to the Willard Parker and Riverside Hospitals, New York. Second edition. Octavo, pp, 979. With 403 illustrations, several in colors, and 27 full page half-tone and color plates. Philadelphia: F. A. Davis Co. Cloth, \$6.50.

A remarkable fact relating to this treatise is that a second edition was called for within six months,—a sure indication of its value. The author is to be congratulated on such signal success. Notwithstanding the sudden demand for a new edition, careful revision has been made even to the extent of changes in many of the articles. Others have been elaborated, as in the treatment of nephritis the salt free diet has been added. Tuberculin inoculation as an aid to diagnosis has been added, and other changes have been made, including new and improved illustrations, bringing it abreast of the immediate present in all essential particulars. It is one of the best textbooks of its kind.

BOOKS RECEIVED.

The National Standard Dispensatory—containing the National History, Chemistry, Pharmacy, Actions and Uses of Medicines, including those recognised in the Pharmacopeias of the United States, Great Britain and Germany, with many references to other foreign pharmacopeias. In accordance with the Eighth Decennial Revision of the U. S. Pharmacopeia, by authorisation of the convention. By Hobart Amory Hare, B.Sc., M.D., Professor of Therapeutics and Materia Medica in Jefferson Medical College, Philadelphia; Charles Caspari, Jr., Ph.G., Phar. D., Professor of Theoretical and Applied Pharmacy in the Maryland College of Pharmacy, Baltimore; and Henry H. Rusby, M.D., Professor of Botany and Materia Medica in the College of Pharmacy of the City of New York; Members of the Committee of Revision of the U. S. P.; New (2d) edition, thoroughly revised. Imperial octavo, 2050 pages, with 478 engravings. Cloth, \$6.00, net; full leather, \$7.00, net. Thumb-letter index, 50 cents extra. Lea & Febiger, Publishers, Philadelphia and New York.

Modern Medicine. Its Theory and Practice. In original contributions by American and Foreign authors. Edited by William Osler, M.D., Regius Professor of Medicine in Oxford University,

England; formerly Professor of Medicine in Johns Hopkins University, Baltimore; in the University of Pennsylvania, Philadelphia, and in McGill University, Montreal. Assisted by Thomas McCrea, M.D., Associate Professor of Medicine and Clinical Therapeutics in Johns Hopkins University, Baltimore. In seven octavo volumes of about 900 pages each, illustrated. Volume V., Diseases of the Alimentary Tract. Price per volume: cloth, \$6.00, net; leather, \$7.00, net; half morocco, \$7.50, net. Lea & Febiger, Publishers, Philadelphia and New York. 1908.

Progressive Medicine, Vol.X., No.4, December 1908. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M.D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia, assisted by H. R. M. Landis, M.D. Octavo, 333 pages, with 28 engravings. Lea & Febiger, Publishers, Philadelphia and New York. (Per annum, in four cloth-bound volumes, \$9.00; in paper binding, \$6.00, carriage paid to any address.)

Transactions of the American Otological Society. Forty-first annual meeting, held at Atlantic City, N. J., June 23, 24, 1908. Vol. XI., part 1. Edited by Dr. J. F. McKernon, Secretary, 62 W. 52d St., New York. Published by the Society. Mercury Publishing Co., Printers, New Bedford, Mass. 1908.

Vaccine Therapy and the Opsonic Method of Treatment. A short compendium for general practitioners, students and others. By R. W. Allen, M.D., B.S. (Lond.) late pathologist to the Royal Eye Hospital, etc. Second edition. Octavo, pp. 244. Philadelphia, Pa. Blakiston's Son & Company. 1908. (Price, \$2.00, net.)

Transactions of the American Surgical Association. Vol. XXVI. Edited by Richard H. Harte, Recorder. Printed for the Association by William J. Dornan, Philadelphia. 1908.

Report of the Commissioner of Education of the United States for the year ended June 30, 1907. Vol. I. By Elmer Ellsworth Brown, Ph.D., LL.D. Washington: Government Printing Office. 1908.

Cataract Extraction. By H. Herbert, F.R.C.S., late Lieutenant Colonel I. M. S., Professor of Ophthalmic Medicine and Surgery in Grant Medical College, and in charge of the Sir Cowasjee Jehangir Ophthalmic Hospital, Bombay. Octavo, pp. 391. New York: William Wood & Company. 1908.

International Clinics. A Quarterly of Illustrated Clinical Lectures and especially prepared articles on Treatment, Medicine, Surgery, Neurology, Pediatrics, Obstetrics, Gynecology, Orthopedics, Pathology, Dermatology, Ophthalmology, Otology, Rhinology, Laryngology, Hygiene and other topics of interest to students and practitioners. Edited by W. T. Longcope, M.D., Volume IV. eighteenth series. Philadelphia and London: J. B. Lippincott Co. 1908. (Cloth, \$2.00.)

MISCELLANY.

A board of commissioned medical officers will be convened to meet at the Bureau of Public Health and Marine Hospital Service, 3 B street SE., Washington, D. C., Monday, January 11, 1909, at 10 o'clock a. m., for the purpose of examining candidates for admission to the grade of assistant surgeon in the Public

Health and Marine Hospital Service. Candidates must be between 22 and 30 years of age, graduates of a reputable medical college, and must furnish testimonials from responsible persons as to their professional and moral character.

The following is the usual order of the examinations: 1, physical; 2, oral; 3, written; 4, clinical. In addition to the physical examination, candidates are required to certify that they believe themselves free from any ailment which would disqualify them for service in any climate.

Successful candidates will be numbered according to their attainments on examination, and will be commissioned in the same order as vacancies occur. Upon appointment the young officers are, as a rule, first assigned to duty at one of the large hospitals, as at Boston, New York, New Orleans, Chicago, or San Francisco.

Assistant surgeons receive \$1,600, passed assistant surgeons, \$2,000, and surgeons, \$2,500 a year. The tenure of office is permanent.

For further information, or for invitation to appear before the board of examiners, address "Surgeon-General, Public Health and Marine-Hospital Service, Washington, D. C."

THE United States Civil Service Commission announces an examination on January 13, 1909, at the usual places, to secure eligibles from which to make certification to fill a vacancy in the position of medical interne (female), Government Hospital for the Insane, Washington, D. C., at \$600 per annum with maintenance, and vacancies requiring similar qualifications as they may occur in that hospital. The department states that it reserves the right to terminate the appointment at the expiration of one year of service if it is deemed advisable to do so.

ITEMS.

M. J. BREITENBACH Company, 53 Warren Street, New York, importers and distributors of Pepto-Mangan (Gude), have sent out their Physician's Daily Memorandum for 1909. This great house has distributed these books to the profession for several years past, and they have proven one of the most useful articles of the kind for the physician's desk ever gratuitously distributed.

THE Antikamnia Calendar for 1909 presents on the obverse a portrait in colors, of a young girl holding a flower, and is entitled "Purity." On the reverse is the calendar proper, and memoranda relating to antikamnia. It is an exquisite blending of art and business, and will be sent to physicians.

BUFFALO MEDICAL JOURNAL.

VOL. LXIV.

FEBRUARY, 1909.

No. 7

ORIGINAL COMMUNICATIONS.

Prolonged and Tedious Labors and Forceps Deliveries Compared as Causes of Epilepsy, Idiocy and Cerebral Diplegias.¹

By JAMES WRIGHT PUTNAM, M.D., Buffalo, N. Y.,

Professor of nervous diseases, University of Buffalo, Ex-president American Neurological Association.

A STUDY of this question has seemed to me of sufficient importance to make a search of the literature for the purpose of finding the views of various writers in different countries as to the relative proportion of cases caused by these factors.

Epilepsy is so dreadful an affliction and, withal, is so prevalent that any means of lessening the number of its victims is a decided gain for the community. It is estimated that there is one epileptic for every 1,000 of the population and that would mean 400 in Buffalo.

Idiocy, that state of mental deficiency dating from birth and lasting through life, is an equally great affliction. The census of 1900 places the number of idiots in the United States as 95,000.

Infantile cerebral palsies are those paralytic affections which date from birth. They were originally described by Little of England, and are known generally as Little's Disease. These three conditions may all be the result of meningeal hemorrhage occurring at the time of birth. It is necessary therefore to enquire into the causes of meningeal hemorrhage in infants newly born. Little reported sixty-three cases in all of these abnormal conditions attended the birth. One was born cyanosed; in one, turning was performed; another had the cord turned about the neck; another was a foot presentation and was unconscious for two hours after birth; in all of these there was evidence of pressure and paralysis. In 1882, twenty years later Ross, of England, reported several cases in which the difficulty resulted from foot presentation. In one case there was foot presentation, the labor

1. Read before the Buffalo Academy of Medicine, December 8, 1908.

was difficult and convulsions with the paralysis immediately followed the delivery.

To an American, Dr. Sarah McNutt, belongs the honor of first proving this paralysis was due to meningeal hemorrhage. Her article was published in the *American Journal of Medical Sciences*, 1885, and has since been quoted by all writers on this subject. Aside from foot presentations, prolonged and tedious labors without the aid of forceps is ascribed as a cause; also labors which were precipitate and labors in which the forceps were used. Asphyxia is assigned as the only cause in many cases. That we may form an opinion as to the relative importance of these, I read the following quotations taken from obstetricians, pediatricists and neurologists.

OBSTETRICIANS.

Dr. Kauffman consulted over forty works on obstetrics for me with reference to quoting them on the question of the comparative harm to the child from the use of forceps, as compared with prolonged difficult labors. The result of his search was that only one author expressed any opinion on the subject or considered it in any way.

They agree, however, in the four indications for the use of the forceps from the standpoint of the child: (1) forceps should be applied if the pulse is under 100 or over 160; (2) if there are sudden marked violent movements of the child; (3) if meconium appears during head presentation; (4) if there is irreplacable prolapse of the funis. These indications are for the preservation of the life of the child. Indications for the application of forceps with reference to the future mental and physical condition of the child is mentioned by E. P. Davis, of Philadelphia in his treatise on obstetrics, p. 740 to 742:

It is noticeable that most of the cases of congenital epilepsy and idiocy develop in children who were not delivered by forceps, but in whom birth was greatly prolonged, although spontaneous. This illustrates the value of forceps as a conservative instrument and emphasises the fact of the necessity for their proper employment. It also draws attention to the value of other obstetric operations which deliver the mother without the difficult and prolonged passage of the child through the unaltered pelvis.

How this opinion of an obstetrician is held in harmony with clinicians in other specialties these quotations will show. Dr. Van Peyma in a valuable paper read before this academy in 1907, said: It should be known that mutilated, mentally enfeebled, paralytic, and dead children; lacerated, invalided and dead mothers are the ever recurring product of unintelligent and conscienceless obstetric practice.

PEDIATRISTS.

Rotch, of Boston, Professor of Pediatrics in Harvard Medical School, in his classic work on pediatrics, says:

Idiocy is due to pressure on the head at birth; and that cerebral palsy results from asphyxia, in tedious prolonged deliveries rather from forceps. (Ed. 1901.)

Holt, 3 edition, 1906, p. 108, chapter on birth paralysis:

Birth paralyses are chiefly due to pressure on the child by the parts of the mother, or by artificial means of delivery. The conditions with which they are associated are tedious labor, breech presentations with difficulty in extracting the head, instrumental deliveries, and premature births.

Taylor and Wells, *Diseases of Children*, 1901, p. 539, under Infant Cerebral Palsy, say:

The chief cause of paralysis during parturition is a slow labor, exercising a long continued compression on the fetal brain and circulation, producing meningeal hemorrhage or thrombosis. This is most common in first children. The use of instruments to relieve this tardiness, though it may occasionally work havoc, yet affords rather a means of prevention in most instances by relieving the prolonged intracranial blood pressure.

A. Jacobi, the Dean of American Pediatricists in the *Archives of Psychiatry*, 1890, in an article calls attention to the fact that many children who are born asphyxiated are physically and mentally incapable of healthy and normal development owing to faults of structure. Not infrequently, such children who are resuscitated after long continued effort live only a few hours or days, or, if they survive, develop into idiocy. While it is admitted that the improper or unskilful use of forceps produces results of this character in some instances, he believes they are oftener due to delay in the use of forceps.

Oppenheim, *Diseases of the Nervous System*, p. 533, says:

Forceps delivery is also blamed, although it does not appear to be as much the use of the instrument as the factor which renders it necessary.

Church-Peterson, 6 edition, 1908, p. 243:

The conditions attending birth frequently lead to brain lesions in the child. The great majority of cerebral birth palsies occur in protracted labors and consequently in primiparæ. A number of them occur in precipitate labor and in both are due to violent compression of the fetal head. Comparatively few cases can be attributed to the use of forceps, and it is exactly this class of cases that the labor is apt to have been tedious. Forceps accidents, however, cannot be denied or overlooked, and the misuse

of these powerful instruments is fraught with serious results to the skull and brain of the child. The facts, however, favor early skilful instrumental interference as compared with tedious labor.

The same authors in the chapter on Idiocy, page 876, say:

Parturitional factors (meningeal hemorrhage, from prolonged labor, asphyxia at birth, premature birth, pressure on the cord, forceps injuries, etc.) are active in about 18 per cent. It may be said that forceps are far less dangerous to the child than tedious labor.

Mills, in his work, 1898, chapter on Cerebral Paralysis of Childhood, p. 615, says:

Prolonged and difficult labor, particularly with first born children is one of the most clearly demonstrated causes of cerebral palsies. While the direct application of force by instruments may inflict injuries on the head and brain, these cerebral affections are far more frequently due to compression of the child's head in the pelvic strait, and to the asphyxia which results from protracted labor. Skilfully applied forceps, indeed, in some cases prevents the occurrence of these unfortunate palsies.

Collins, *Nervous Diseases*, 1904, p. 181, says:

It is unnecessary to enumerate all the causes which contribute to the encephalopathies of natality. They may be summarised in one word—dystocia. The liability of the brain of the child at the time of birth is in direct proportion to the duration of the labor. The dangers of dystocia are usually considered relative to the life of the child, but the urgency is very great that they be considered relative to the occurrence of infant cerebral palsy. The injuriousness of the forceps delivery is slight when compared with the far reaching effects of tedious labor.

Dana, Chapter LI, p. 489. Those cases of cerebral palsy that occur at the time of birth are due to tedious labor, the use of forceps, and other injuries at the time of labor.

Starr, 2 edition, p. 521, chapter on Cerebral Atrophies of Childhood, says:

Many cases date from birth. Thus in 177 of my cases (400), there was a history of difficult labor, or a malposition requiring manual delivery, or instrumental delivery. In several cases labor was premature, and the child was kept alive with difficulty. In two cases the patient was a twin. In many cases the child was born asphyxiated. In all these cases it is probable that meningeal or cerebral hemorrhage occurred during delivery, and the pressure upon the brain prevented normal development.

Starr, p. 742, Epilepsy: Injuries of the brain, causing hemorrhages either gross or capillary, followed by the development of cicatricial tissue are a very common cause of epilepsy. That such injuries occur in the process of labor by undue compression of

the head or by a delay in the delivery, the formation of a large caput and a corresponding congestion of the brain is admitted. This is the most common cause of the cerebral atrophies of childhood in which epilepsy develops in a large percentage of cases. No surprise is expressed when epilepsy appears in these cases where a gross lesion is apparent. But many cases of epilepsy date from birth. Here the hemorrhage is so small as to leave no evidence of paralysis or of sensory defect, or of mental deficiency, but has been sufficient to form a focus of irritation in the brain.

Dercum, p. 507: Cases having their origin in trauma during birth is quite large. The head of the child in its passage through the pelvis is exposed to varying degrees of pressure, and it cannot cause surprise if some times, for example, when this pressure has been excessive or unduly prolonged, that cranial lesions ensue. It is not impossible that the prolonged asphyxia during birth is a factor in the subsequent cortical degeneration. A few cases of cerebral palsy have been traced to injury by the forceps. Osler had nine cases of such injury due to this cause in one hundred and twenty infantile hemiplegias. It is certain, however, that the injury is due less frequently to the forceps than to the dystocia which renders their employment necessary.

Sachs, p. 436: The etiology of birth palsy is a very simple one. It is surprising how much pressure the brain and skull will tolerate without injury, but it is natural that harm should occasionally be done. My own studies, based on the study of a very large number of statistics, have proved that tedious labor is a more frequent and more disastrous factor than instrumental delivery. They occur most frequently in first born children. If physicians were more confident in their ability to apply forceps, protracted labor would not be as powerful an etiological factor as it is at the present time. There is, therefore, a distinct inference to be drawn from these facts, and a word of warning should be uttered to the obstetrician that, other things being equal, and, above all, the life of the mother not being in danger, it is wise to curtail the period of labor as much as possible, and not necessarily to wait until the child's heart's action becomes feeble. Many children might have escaped idiocy and epilepsy if the period of labor had been properly managed.

Pierce-Bailey in *American System of Practical Medicine*, Loomis and Thompson, 1898, Vol. 4, p. 861:

The factors which are active at the time of birth in the causation of idiocy are mainly of a traumatic character, and are such as may bring about direct injury of the infant brain or its membranes, or such as may obstruct the circulation for too long a time. Thus prolonged parturition by causing protracted pressure on the ununited bones of the skull may seriously compress the brain or may induce asphyxia. Compression of the head by forceps figures in a certain proportion of cases.

Osler, in *Pepper's System*, Vol. I., speaking of cerebral palsies, page 711, says:

The possibility of injury to the brain must be borne in mind in case of protracted labor. Probably a long continued compression of the head entails greater risks than the application of the forceps.

Berkley, Johns Hopkins, in his treatise on Mental Diseases, page 492, says:

Difficult delivery, with compression and injury of the infants skull at birth, is the cause of a certain proportion of cases of idiocy. The use of the forceps in delivery apparently plays a very unimportant part in the cephalic injuries, long continued compression being far more injurious and deleterious to the child than properly conducted artificial extraction.

Wulff in 1,436 cases of idiocy found 11.9 to be due to injury to the skull at or about the time of birth.

Christian A. Herter in *Diseases of Nervous System*, page 389, cerebral birth palsy, says:

This form of infantile cerebral birth palsy depends on meningeal hemorrhage over one or both sides of the convexity of the brain or on its base, the results of injury during birth. There is a history of some distinct difficulty in birth, either an unnatural presentation or more frequently prolonged and difficult labor with head presentation in primipara. Comparatively few instances can be attributed to forceps delivery alone. Precipitate delivery produces compression of the head similar to that occurring during prolonged labor.

Stewart Paton of Johns Hopkins in his book on Psychiatry, 1905, page 202 quotes: Fletcher Beach, "in examining 810 idiots, found that 35 cases showed that the injury was due to the use of forceps, and that 216 cases were cases of difficult labor without instrumental delivery."

Kuntzel, in 500 cases of idiocy, estimated 8.9 per cent. forceps had been used; a difficult but noninstrumental delivery was a factor in 4.5 per cent.

Bianchi of Naples, in his book, page 463, says:

Injuries of the head during pregnancy and difficult parturition, with prolonged compression of the head and consecutive lesions (meningeal or even cerebral hemorrhage) and injuries to the head after birth, are perhaps among the most frequent causes of the arrest of development of the brain.

From *Transactions of the Obstetrical Society of London*, Vol. 18, p. 298-300 (1876). I quote:

THE OBSTETRICAL ASPECTS OF IDIOCY, BY J. L. DOWN, M. D.

I think it can not fail to strike the fellows of the society as a very important fact that no fewer than 20 per cent. of the idiots of my investigation were born with well-marked symptoms of suspended animation—symptoms which required marked and strenuous efforts for their removal and to effect resuscitation. Moreover, it is specially interesting that while, as we have said, 24 per cent. of idiots generally are primiparous, as many as 40 per cent. of resuscitated idiots come under this category. Clearly, then, suspended animation is a condition as far as possible to be avoided by the practical obstetrician. Bearing on this part of the subject is the question of instrumental interference. I have made a careful inquiry on this subject over a large area, and with the expectation I should find a large amount of idiocy to be the result of “meddlesome midwifery,” but I am bound to say that my statistics falsify my anticipations, and redound to the care with which instruments are employed in parturition. I find from an examination of all my cases about which positive information could be obtained that in only 3 per cent. were the forceps employed. In every case, however, where they were employed the friends of the child believed that the instrument alone was the cause of the disaster, while in nearly every case I could discover quite sufficient to account for the mental defect in the neurotic history of the progenitors. In a very few cases, only a small fractional percentage could I arrive at the conclusion that the use of forceps was the principal cause of the calamity.

I find in a very large number of my cases that the labor was stated to be unusually tedious and prolonged. Dr. Playfair has shown that the employment of the forceps does not interfere with the viability of the offspring, and that a prolonged labor is more compromising to the life prospects of the child than a judicious and timely application of the forceps.

Certainly my statistics make clear to me, contrary to what some years since was advanced by Dr. Arthur Mitchell and in harmony with Dr. Ramsbotham's experience, that the use of the forceps is not an important factor in the production of brain disease. When, however, it is borne in mind how frequent is the association of suspended animation with idiocy, it cannot, I think, be too strongly enforced that the mental integrity of the child is more likely to be compromised by a prolonged pressure in the maternal passages than by skilled employment of artificial assistance. The accoucheur who postpones instrumental help often does so at the risk of terrible consequences to the nervous system of the little one he is solicitous to protect.

G. E. Shuttleworth in Vol. VIII, page 32, of *Encyclopedia Medica* in the article on mental deficiency says:

Birth palsies due to intracranial pressure at the time of birth. While instrumental delivery has been blamed by certain writers, it is probable that protracted pressure in an unassisted, unduly

prolonged labor is a much more potent factor in causation of meningeal hemorrhage and mental defect; in fact in my statistics and those of Dr. Beach, protracted labor figures more than four times as often as forceps deliveries in causation of mental defect.

In the Royal Albert Asylum for Idiots, England, the assigned cause of idiocy in 29 per cent. of the admitted cases is prolonged labor without instrumental interference. *British Medical Journal*, January 30, 1886.

Crichton Browne in the West Riding Asylum, advances the opinion that protracted and abnormal labors are an important factor in the causation of idiocy.

Mitchell, quoted by Sachs, in his chapter on idiocy, page 544, reported 57 cases of idiocy in which labor lasted more than thirty-six hours, 22 cases in which forceps were applied, 9 of which showed the impression of the forceps on the head after birth; 4 were born by version; 6 were breech presentations; 9 were born prematurely; 29 were born asphyxiated and supposed to be dead. In this record, we see that tedious labors were 57 forceps cases, 22 less than one-half.

Fisher, Edward D., in the same work, in the article on cerebral palsies of infancy, p. 400, says:

A very common cause and one of much importance to the general practitioner is of traumatic origin, due to pressure of the maternal parts in tedious delayed labors, or from an abnormally narrow pelvis, or an unusually large head on the part of the child, or again in the use of the forceps. The last cause is less frequent than is generally supposed. Delayed labor, even without abnormally of mother or child is more frequently the cause. It is wiser, therefore to apply the forceps early, rather than to submit to the dangers of compression.

Gowers, page 415, in his diseases of the Nervous System, says:

The hemorrhage that injures the brain is almost always due to special difficulty in parturition. In about one fifth, the head is born last, and in such cases the intense mechanical compression makes the occurrence easy to understand. The same symptoms occur in cases of head presentation when the labor has been long and difficult, and the immediate effects were shown by the difficulty in getting the child to live, or by distinct symptoms of convulsions, rigidity, immobility of some part or dysphagia, present from birth or coming on a few days after. About one-half the cases were first born but in almost all the others the labor was specially difficult. In some of the cases the forceps were used, but it is probable that as a rule the lesion was the result not of the use of the instruments but of the conditions that made them

necessary. In rare cases the clumsy use of the instruments has produced the injury, as in one instance in which a permanent indentation corresponded to the center of the opposite arm which was affected. But it is most important that the fact should be clearly recognised, that the result is not due to the instrumental aid.

This research shows that the obstetrician has a much more important function than merely bringing a live child into the world. We also demand of him that he so perfect himself in the science of obstetrics that the preventable deformities, idiocies, and epilepsies shall be reduced. When we realise that there are in the United States upward of 95,000 idiots and more than 123,000 epileptics, that many of these are so afflicted from the preventable accidents of birth, these quotations taken from the writings of eminent men in Europe and the United States, show with marvelous unanimity. There is not a dissenting voice. All agree that, speaking generally, idiocy, epilepsy and cerebral palsies of childhood are due to one of three causes, asphyxia, injuries to the head from forceps, and injuries from prolonged compression. Let us hope that this truth will so impress itself on the profession that these accidents of birth may be reduced to a minimum.

525 DELAWARE AVENUE.

The Diet in Typhoid Fever.¹

By I. HARRIS LEVY, Ph.B., M.D., Syracuse, N. Y.

Associate Professor of Clinical Medicine, College of Medicine, Syracuse University;
Visiting Physician to The Hospital of the Good Shepherd.

THE diet in typhoid fever, we are told by all the textbooks should be liquid—mainly milk. It is fair to raise the question, why was this diet so generally adopted? Were typhoid patients formerly fed solid food, and was it found to lead to a high death rate or to serious complications: and did a starvation or fluid diet reduce them? No, such is not the history of the liquid diet. On the contrary, it is rather a survival. It dates from the antiphlogistic days when fevers were believed to be due to increased action of the heart and arterial system. To counteract this asthenic condition, it was considered necessary to puke, purge, bleed, and starve. Such was the treatment of all fevers.

With the dawn of the modern era, and the decline of the antiphlogistic pathology, our treatment of fevers changed. We no longer bled and purged, but continued the starvation diet.

¹ Read at the forty-first annual meeting of the Medical Association of Central New York, held at Buffalo, October 27, 1908.—Edited by William C. Krauss, M. D.,

While the milk diet is strictly speaking not a starvation diet, yet, since it does not supply more than half the necessary calories of energy needed by a typhoid patient, it leads to considerable loss of strength and weight.

The advocates of the fluid diet claim that during typhoid, the digestive organs are impaired, and consequently solid food is badly borne: that milk is the most easily digested food—being a fluid it does not irritate the ulcers in the bowels; that solid food does irritate them, exposing the patient to the dangers of hemorrhage and perforation: and that relapses are common when solid food is allowed too early.

But despite these arguments, during the past ten years, a number of articles have been written by eminent clinicians both in America and abroad protesting against a liquid, and advocating a much more liberal diet in typhoid fever. They show that in actual practice solid food does not increase the death rate and complications, but, on the contrary, it seems to reduce them. Besides, the patients are much more comfortable, there is less loss of weight and strength, and the convalescence is shortened. Also, when the patient is fed solid food throughout the disease, there is practically no danger of over-eating during early convalescence, nor is there any need of obtaining food surreptitiously.

Let us examine the claims of the opposing advocates. Is digestion greatly impaired during typhoid fever? The experiments of von Hoesslin, Leyden and Klemperer, Puritz, Folin, and others show conclusively that the average typhoid patient absorbs from his intestines almost as completely as does the healthy individual. Only in the severest cases is the absorption materially decreased. In the average case, without profuse diarrhea, the digestion of carbohydrates, proteids, and fats is within 10 or 15 per cent. of the normal. Folin found the absorption of carbohydrates practically normal.

Is milk a perfect food for typhoid patients? It might be supposed that milk being a liquid would readily pass into the intestines. As a matter of fact, it is only a liquid outside of the body. In the stomach it soon becomes coagulated, and forms a tough leathery mass, which offers great resistance to the digestive juices. It has been experimentally demonstrated in the healthy individual, that a glass of milk does not entirely leave the stomach until two hours have elapsed from the time of swallowing it. A pint of milk requires no less than three and one-half hours for its complete disposal. After milk leaves the stomach, its digestion is completed in the intestines. When it is not well digested, as frequently happens, curds of varying size appear in the stools. Physiologists also tell us, that when milk is

given by itself as the exclusive diet to adults in a state of health, it is not very well absorbed—worse indeed than any other animal food. As Hutchinson says in his *Manual on Dietetics*: “Even under the most favorable conditions, only about 90 per cent. of the available potential energy contained in the milk ever reaches the blood. The rest escapes from the body as unabsorbed waste.” Milk is much better absorbed when it forms part of a mixed diet. Wait found that when milk alone was taken that 92.1 per cent. of the proteid and 86.3 per cent. of the carbohydrate were digested. On the other hand, when the diet consisted of bread and milk 97.1 per cent. of the proteid and 98.7 per cent. of the carbohydrate were utilised. There are other objections to the milk diet. Some people dislike it, others cannot take it without upsetting the stomach. When badly borne, it is the worst of foods. Milk also may produce flatulence and tympanites. The latter frequently complicates typhoid fever, and when it does, it demands a change in the diet. Likewise the presence of curds and coagula in the stools demands a decrease in the quantity, or a complete withdrawal of the milk. Milk is a good culture medium for germs, and in children we know that it may cause the worst kind of intestinal indigestion. When the milk diet is employed in typhoid, it is customary to allow the patient about two quarts in the 24 hours—a glass every two hours. Two quarts of milk furnish about 1,300 calories of energy. A typhoid patient requires about 2,800 calories, more than double the amount furnished by the milk. Consequently, an adult loses from ten to sixty pounds during the course of the fever.

The amount of inorganic salts in the milk may also be detrimental during the later stages of the disease. Wright and Knapp have suggested that the calcium salts by increasing the coagulability of the blood favor thrombosis.

Can the body loss be prevented during fever by a more liberal diet? A number of experiments have been carried out to settle this point. Some loss is likely to occur even when a full diet is allowed. Shaffer and Coleman of Bellevue Hospital undertook to determine the extent to which it was possible to limit the loss of body protein. They fed their patients large amounts of carbohydrate in the form of milk sugar. They say:

Our results show that the febrile loss of body protein may be retarded and even wholly prevented or compensated for. But the results show likewise how difficult this is to accomplish. It was only when we gave 60 or 70 or even 80 calories per kilogram—between 3,000 and 4,000 calories in the twenty-four hours—that the greatest sparing was observed. The important point is however, that it is possible to give typhoid patients such liberal diets without, so far as our experience shows, producing any harmful results, but, we believe with decided benefit.

Does milk minimise the dangers of hemorrhage and perforation, and does solid food increase them? It is argued, milk being a fluid causes less irritation, while solid food coming in contact with the ulcers tends to irritate them. Here there is a double fallacy. It has already been pointed out that milk in reality is not a liquid food, that it forms leathery curds, and unless well digested passes through the bowels in hard cheesy masses. On the other hand, solid food, with the exception of cellulose, seeds and the like, is in a liquid state by the time it reaches the small intestine. It is not the condition of the food as it enters the mouth, but its condition when it reaches the bowels that is important.

Too much stress has been laid on the intestinal manifestations of typhoid. In our treatment we have centered our attention on the ulcers and the bacteria. Hence the use of the various intestinal antiseptics for which such marvelous results have been claimed. The newer investigations, however, have shown that typhoid in its early stages at least, is a bacteremia. Blood cultures show the presence of the Eberth bacillus at some stage of the disease in practically all of the cases. A certain number of cases of typhoid run their course without any intestinal lesions. There is a typhoid with local manifestations limited entirely to the gallbladder. The severity of the diarrhea is likewise no indication of the number or the depth of the ulcers. Severe diarrhea may be present with superficial ulcers or even with intact bowel, as in a case reported by Dr. Bryant. On the other hand, diarrhea may be absent with deep ulceration. It has by no means been demonstrated that food is the cause of an ulcer perforating. It is evident that large irritating masses might cause the thin bowel to give way. But no one would advocate such a diet for a typhoid patient. Perforation occurs in typhoid irrespective of the diet—in the starved case as well as in the fed. As Bushuyev says: "Perforation depends more on the nature of the ulcer than upon the diet."

The same fear of perforation led us to withhold food by mouth for some days following hemorrhage in gastric ulcer. This was a universal rule. But since Lenhartz has shown that our fears were groundless, we must modify our ideas. He feeds his gastric ulcer patients by mouth from the start, and his results are better than under the old treatment. Lambert, Minkowski, and Wirsing have followed his dietary and report favorable results. Wirsing states that his results were best in the severe cases. Again, recent autopsy investigations in pulmonary tuberculosis show that tubercular ulcers are very common in the ileum. Yet forced feeding is the rule in tuberculosis and no one fears

a perforation. Barrs of Leeds, who is an advocate of liberal feeding in typhoid fever says:

It is difficult for me to conceive any method of treatment more calculated to delay healing and so favor perforation than the prolonged period of starvation which the plan of fluid feeding, still advocated as essential for 10 or 14 days after the febrile state has come to an end, adds to the devastating effect of pyrexia, and limited feeding of the disease itself. The conditions favorable to healing are the same for the small intestine as for any of the external parts of the body, and no surgeon, I imagine, would expect to see wounds undergoing repair in the shortest possible time in a patient living on fluids alone.

Does a liberal diet in typhoid fever relapse? A relapse sometimes does occur when a sudden change is made in the diet. But it is a question if it is more than a coincidence. Relapses occur on a fluid diet when no change has been made. On the other hand, they occur only in a small percentage of the cases when solid food has been given throughout the disease. Relapse as we now understand it, means re-infection. It is doubtful if a true relapse ever is due to diet alone. Food should no more cause a true re-infection than the original attack.

It is argued that solid food liberating a large amount of energy increases the fever. During typhoid an elevation of temperature sometimes occurs when a sudden change is made either in the quantity or quality of the food—the so-called *febris carnis* or food fever. Its explanation is not clear. Some consider it akin to the fever caused by excitement. Others regard it as due to the liberation of a large amount of energy. The heat regulating center accustomed to the low diet cannot easily accommodate itself to the changed conditions, and as a result is thrown out of equilibrium. When it does occur, it is of brief duration and of minor importance—very different from the true relapse.

Pawlow and his followers have shown the effect of appetite on the digestive secretions. When food is forced or not relished a poor gastric juice is secreted. The diet should therefore not be monotonous but varied. The diet also has a marked influence on the secretion of bile. On a starvation diet very little, if any, is secreted. The bile stagnates in the gallbladder and is then likely to be infected by the intestinal flora. Flexner found the Eberth bacillus in the gallbladder in 50 per cent. of his typhoid cases coming to autopsy. The germs may produce a complicating cholecystitis or may remain quiescent for years. The typhoid bacillus has even been found in gallstones. Pawlow has shown that some foods produce a greater flow of bile than others. Meat is the most powerful excitent of this secretion. The more proteid the food, the more fluid the bile and the better

the drainage of the gallbladder, and, consequently, the less likelihood of infection.

Theoretical arguments, however, cannot settle a question of this nature. "The proof of the pudding is in the eating," and so here, the practical results must decide. It must be demonstrated that a liberal diet not only does not increase the dangers of typhoid, but that it has positive advantages. A number of careful clinicians in various parts of the world have urged a more liberal feeding—basing their claims on their results.

Among the first to try the liberal diet was Bushuyev of the Military Hospital of Kiev. He allows his patients a very liberal diet. During 1895-96, he treated 80 patients on this diet, while a colleague treated 74 on a fluid diet, chiefly milk. His mortality was 10 per cent., while that of his colleague was 12.1 per cent. During 1897, he treated 318 cases on a solid diet with a mortality of 8.2 per cent. The average hospital mortality for typhoid for the ten previous years was 12.4 per cent. Of 1,100 cases treated in Russian hospitals on this diet there were but 69 deaths, a percentage mortality of 6.3 per cent. Bushuyev says that:

Under this regime the general condition of the patient is incomparably better than when kept upon an exclusively milk diet. The common complaints are scarcely ever heard. At breakfast, dinner and supper the patients are uncommonly wide awake; even those who are very ill; sit up in bed, beg for food, and eat with much satisfaction; only a few have to be fed by nurses. If one observe the patients at meal times he wholly forgets that these individuals are seriously ill, with temperature above 39 C. The military authorities are amazed on visiting a typhoid ward at the time of breakfast or dinner, in as much as they see almost no typhoids.

The observation of the late Prof. M. T. Chudnovsky that the typhoid state disappears under a full diet, is confirmed. During the first hours in the ward the patient lies in a motionless condition, failing to answer questions and refusing food. But if one succeed in some way or other in persuading him to eat a bit of meat, or cutlet or an egg, he immediately begins to show some interest in the surroundings. In a few days, often within a day, no trace of the typhoid condition remains. Unfortunately, it is impossible to persuade all typhoid patients to eat. Attempts at forced feeding cause vomiting.

Thayer who abstracted the article for *Progressive Medicine* (1899), comments as follows:

Is it not more than likely that many cases of typhoid fever suffer from too restricted a diet? Bearing in mind the long course of fever through which a patient must pass, the dangers to which he is exposed, not only from exhaustion and the acci-

dents peculiar to typhoid fever, but especially from the various secondary infections to which he is so easy a prey at the end of his long period of fever and fasting, our main object should be to keep up his general nourishment by every means in our power. Obviously, if a more liberal diet than that afforded by the purely liquid regimen could be assimilated, the patient's strength would hold out materially better. In diphtheria or pneumonia or febrile tuberculosis, do we not make every effort to induce the invalid, to take as much as he can bear of a simple, easily absorbable, and nourishing diet? And yet in typhoid fever we are restrained by a vague fear that any departure from the customary regimen is for some reason or other, dangerous. What ground have we for the fear? The ordinary answer is the quotation of a case where, after a long course of fever with a much restricted diet some indiscretion has produced a sudden rise of temperature with alarming symptoms. An indiscretion in diet may produce symptoms in any condition of severe physical exhaustion, but the reviewer has never seen anything to suggest that it is more common in typhoid fever than in any other similar condition.

Barrs in England also early advocated a solid diet in typhoid. In 1897 he reported 31 cases with 3 deaths. In these 3 fatal cases, he was never able to give solid food. There were no deaths in the cases receiving solid food early. He concluded his paper by saying:

I have not hitherto urged any reason for the plan which I advocate beyond the fact that it involves the least departure from the normal line of health. But I am prepared to urge that it is a method which is likely to modify favorably the death rate of typhoid fever, to shorten convalescence to diminish the risks of complications and sequelæ and generally to make typhoid fever, a less formidable and more manageable disease than it is under our present standard methods of treatment.

Marsden, in 1900, reported 200 cases fed on bread and milk, custard, fish with mashed potato, chicken, bread and butter, and minced meat. He says:

I think from a review of these 200 cases it must be concluded that a careful system of dieting, such as I have mentioned, has no injurious consequences, and when one considers the benefits obtained—viz., more rapid recovery, diminished risk of surreptitious feeding with possible harmful substances, lessened tendency to bolt food and finally lessened tendency to asthenic complications, as post-typhoid anemia, gangrene, and the like, one must admit that there is no justification for resisting a craving appetite in the manner at present in vogue.

In America the earliest and strongest advocate of a liberal diet in typhoid has been Shattuck of Boston. During 1886,-1893, he treated 233 patients on an exclusively milk diet with a mor-

tality of 10 per cent. From 1893 to 1902, he treated 246 patients on a liberal diet and the mortality was but 8.45 per cent. While treating his patients in the orthodox manner, he says:

I closed my ears to the clamors of adults, and my eyes and heart to the tears of children, as I now believe, unnecessarily. He further says, "One of the things which set me thinking on this question of the diet in typhoid was the favorable course run by several acute febrile cases for whom I ordered a full diet because they were weak: believing at the time of so doing that typhoid could be excluded, but being forced to the conclusion later that only typhoid fever could explain the whole course of the disease. These patients did perfectly well, were happier and convalesced more rapidly than my recognised typhoid cases fed exclusively on milk.

Shattuck's diet consists:

1. Milk, hot or cold, with or without salt, diluted with lime-water, soda water, apollinaris, vichy; peptogenic and peptonised milk; cream and water, milk with white of egg, slip, buttermilk, koumyss, matzoon, milk whey, milk with tea, coffee and cocoa.
2. Soups: Beef, veal, chicken, tomato, potato, oyster, mutton, pea, bean, squash, carefully strained and thickened with rice (powdered), arrow root, flour, milk or cream, egg, barley.
3. Horlick's food, Mellin's food, malted milk, carni-peptone, bovine, somatose.
4. Beef juice.
5. Gruels. Strained oatmeal, crackers, flour, barley water, toast water, albumin, water with lemon juice.
6. Ice cream.
7. Eggs, soft boiled or raw, egg nog.
8. Finely minced lean meat, scraped beef, the soft part of raw oysters, soft crackers with milk or broth, soft puddings, without raisins, soft toast without crust, blanc mange, wine jelly, apple sauce and macaroni.

Fitz in a study of typhoid at the Massachusetts General Hospital for the 78 years ending with 1898, tabulates the mortality and complications in the various years, and under the changing treatment. Especially interesting and bearing on this subject of diet are the statistics for the years 1893 to 1898. He compares Shattuck's patients treated with a liberal diet and those of his colleagues restricted to milk and other fluids.

	Mixed Diet Per cent.	Milk Diet Per cent.	Strained, Starchy and Proteid Fluids Per cent.
Mortality	11.3	15.1	16.6
Hemorrhage	9.	10.6	16.
Perforation	3.4	2.8	1.8
Relapses	10.2	13.1	11.1

Fitz says in closing: "A considerable variety in diet may be permitted not only without detriment but also with possible benefit to the patient."

Kinnicutt follows Shattuck's dietary at the Presbyterian Hospital in New York. From 1900 to 1906, he treated 74 cases on this diet with a mortality of 12.16 per cent. He says: "By such a management I am convinced that much suffering may be avoided, prolonged, disability materially modified, the dangers of secondary infections more efficiently met, and a more rapid convalescence effected."

Nichols, of Washington, who has written a splendid monograph on this subject, reports 40 cases of his own treated with a liberal diet with most gratifying results. He tabulates 1,518 cases treated in the various hospitals of the world on the mixed diet with 104 deaths, a mortality of 6.9 per cent.

Manges, LeFevre, Claytor, Morehouse, Hare, Smith and many others in America and abroad have also strongly urged an enlarged dietary in typhoid.

My experience with a mixed diet in typhoid dates from the fall of 1906. Since then, I have treated 24 patients sick with typhoid in the wards of the Hospital of the Good Shepherd and in private practice after the manner of Shattuck.

My first patient was a nurse. For the first two days she was on a fluid diet. She was exceedingly nervous and irritable. She absolutely refused to take milk. She was kept in bed with difficulty and did not sleep well. We anticipated a great deal of trouble, as in every way she promised to be a difficult patient to handle. I then allowed her bread and butter, custard, boiled rice and soft boiled egg, and later chicken and broiled steak. From the moment she was allowed solid food, there was a complete change in her behavior. The nervousness and irritability disappeared. She looked forward to her meals with a great deal of interest, and the subsequent course of the disease was uneventful. She left the hospital at the end of six weeks, and in two more she resumed her work as nurse, apparently none the worse for the illness. I must confess that for the first few days I watched the experiment with trepidation, and at all times it seemed intensely strange to see a typhoid patient with a temperature of 104 eating bread and butter, chicken and beefsteak with impunity.

All of my 24 patients so treated recovered. There was not a single case of perforation or severe hemorrhage. There were three relapses; otherwise, complications were conspicuous for their absence.

Not all of the patients are kept on the same diet, nor is there any attempt at forced feeding. The individual rather than the

disease is treated. As soon as the patient admits that he is hungry and expresses a desire for food, it is allowed. The presence of fever in itself is never a contra-indication. The quantity of food is gradually increased and the effect watched, and if for any reason it is deemed advisable, the quantity as well as quality is changed.

Great care is necessary in making any material change in the regimen of a patient kept on a fluid diet for several weeks or more. The digestive organs, like the rest of the body, owing to the low diet is in a much reduced state, and cannot respond to any sudden demand made by an increase either in the quantity or the quality of the food. A rise in temperature may follow these indiscretions. Formerly such elevations of the temperature occurring during convalescence were supposed to mean that solid food was given too early, and that a relapse had occurred. In reality, it only meant that the unnecessarily weakened digestive organs could not resume their full functions without gradual training.

There is a marked difference in the appearance of the fed patient and those kept on a liquid diet. The former are more comfortable, the tongue is clean. There is an absence of the apathy and indifference so characteristic of the disease. The patients anxiously look forward to their meals, and do not exhibit the typhoid state. Physicians visiting the wards are surprised at the appearance of the patients, and admit that they never before had seen such comfortable looking typhoids.

Not only is the patient more comfortable during the course of the fever, but the period of convalescence is shortened. Having lost less, there is less to regain. The resistance of the patient being better, he is less likely to fall a prey to the secondary infections so common with typhoid. And lastly, the patient is able to resume his or her occupation much earlier—a consideration of no small importance especially to the working classes.

I am fully aware that in so variable a disease as typhoid it is dangerous to draw conclusions from a few cases. However, I am of the opinion that there is already sufficient evidence to warrant the belief that we have been responsible for considerable unnecessary suffering by adhering to too strict a diet in typhoid. A more liberal dietary apparently seems to diminish rather than increase the mortality and complications.

IN operating under local anesthesia in diabetic patients it is well to omit the use of suprarenal preparations, as in these cases it is liable to favor the occurrence of gangrene.—*International Journal Surgery*.

Some Essentials of Preventive Medicine.¹

By I. M. SLINGERLAND, M. D., Fayetteville, N. Y.

EVER since the dawn of civilisation in every department of human endeavor there has always been an age of foundation, of transition, and of renovation,—so in the medical world. Until recently nearly the whole object of scientific medicine has been curative or alleviative but its watchword for the future will be preventive, although curative and alleviative will have to be employed for centuries, because its progress will be hindered by lack of unity and organisation in the profession, political corruption and the niggardliness of municipalities and nations to provide adequate means to carry the work to its fullest and richest perfection.

The old saying, "an ounce of prevention is worth a pound of cure," would lead us to reason, that it is worth at least sixteen times as much to prevent disease as to cure it. Hence, our fees should be sixteen times as much as they are now for cure. In fact, we get only a very small fractional part, because physicians have not educated the public to pay for such services, as well and promptly as they have been educated to pay in all other lines. Hence, the business side of medicine should be taught in all medical schools.

Medicine is not what it was,—less of empiricism and more of an exact science,—so Voltaire's definition of medicine does not apply with as much force today. He said, "one balances upon a foothold of which he knows little, to reach toward a spot of which he knows less, and brings up on another of which he knows nothing."

What are some of the essentials to make preventive medicine as nearly perfection as possible? I can only mention a few and those very briefly. One of the most, if not the most important is the begetting of life. None of us have the say of our individual existence, but we all have something to say about other lives. None ought to be allowed to marry or procreate, who in any way are afflicted with an incurable, contagious or communicable disease. Perfect specimens of humanity should be the foundation of the race. We should encourage the raising of strong, vigorous, healthy children, thereby making the race more immune to disease. Each one's opsonic index would be normal and would remain so with proper care. If the present state of society continues to exist or grows worse, opsonines will have to be injected frequently to keep our miserable lives a little longer on earth than they otherwise would stay. The race would

1. Read at the forty-first annual meeting of the Medical Association of Central New York, held at Buffalo, October 27, 1908.—Edited by William C. Krauss, M. D.

finally become as in ancient times, when sin was everywhere present and salvation was nearly swallowed or burned, to arise again from the ashes, as there were a few seeds left that neither sin nor fire could destroy. Such reasoning is not approved by all, as they say it would interfere with a person's individual right to select his own life partner, but by the facts of life as brought out by the papers and other sources, a great army of men and women are not capable of making a proper selection of their helpmate. It seems to me that marriage with that class is considerable sentimentality, a very little love, much lust and ultimately divorce, suicide or murder. If marriage was harder to contract there would be less wrecks, and divorce less easy, each would find his or her proper mate, before taking the final step. Again, no habitual criminal, or drunkard, or mental defective, or one who is able and yet absolutely refuses to work, should be allowed to marry or have children. If married or not, they should be unsexed or made sterile as such parentage breeds similar, which will ruin any nation if let go to the extent and with the pace we are now traveling.

Jonathan Edwards's gift to humanity in his 1,400 noble descendants had only one among the number that in any way disgraced the name and that was Aaron Burr. But this gift is counterbalanced, or more so, by the 1,500 criminals that sprang from one pair of English criminals. The forces of evil are continually striving to pull down and destroy all normal healthy life. The only way to counterbalance the result is by rearing the best possible stock. Diseased parentage brings forth diseased children or ones susceptible thereto.

Physicians are compelled by law to report all contagious and infectious diseases, and they ought to report all communicable diseases. You do not interfere with their personal liberty in the one case more than in the other, though that would be the cry. One's personal liberty ought to end when that liberty diseases and destroys his neighbor's life and those entrusted to his care. The law that prohibits a physician from divulging the secrets of his patients, necessary for their treatment, ought to be amended so far as it relates to venereal diseases.

Which one of us, if we had a daughter interested in or about to marry a man who had sometime or other had a venereal disease, would not warn her of her danger, law or no law. You would require of him an absolute guarantee of his perfect recovery, before any marital relations would meet with your approval. Would not every true parent be willing to pay large sums, commensurate with their means, to have you save their daughter? It is as much murder not to save a pure, innocent girl, as it would be to make her life extinct by a drug, a blow

or a bullet, for the diseased state she would most surely get in, if she marries such a one, is nothing but slow murder, besides such diseased state would make her suffer the torments of the damned, and wreck home, family and hopes of eternal life. There was a time when physicians could be held blameless, for they did not know the nature of, nor the destructive power of their insidious work. Now every thing is changed, and knowledge is power to stamp out some of the greatest curses of the race. All married and all of the marriageable age, ignorant of these facts, should be instructed in regard to the dangers and results of diseased unions to themselves and offspring. If they should become diseased after marriage, they should be put in the best possible physical and moral condition at once.

A very important essential would be to have all children taught sex life, as early as they are capable of comprehending, as a fortification, and not have the most important function in the vegetable and animal kingdom, that of reproduction, relegated to the street gammons, and the vile; to teach the boys and girls what should be entrusted only to the most skilled and purest of teachers, physicians and intelligent fathers and mothers. The sex life of the simplest forms of plants should be taught first, and there should be a gradual growth in sex knowledge until its full nature is understood in the highest type of animal life—man. That would be a very great achievement for mankind, as all then would look upon sexuality in its pure sense and would guard it as a priceless blessing, not to be misused or abused, but used as nature intended. Ignorance may be bliss sometimes, but in the matter of sexuality it is disease, death and eternal destruction. On its proper teaching and the proper guiding of the sexes hang the destinies of our race.

Perverted sexuality, is perverted mentality, morality and spirituality. No good fruit grows without perfect seed. Neither does perfect mankind exist without good healthy parentage. Hence, all schools should have medical inspectors, paid by the state a good salary to look after the physical, moral and mental development of, and the hygiene of all the functions of the child, as well as of the sanitary conditions of the school. When God created man in His image, he was pure and free from disease, but by disobedience, a great part of that image has been lost through disease. Unless these processes are checked by the forces of good, the forces of evil will mar still more that image until man is buried in physical and moral filth.

Another essential is in the matter of charity. Sweet charity in most cases as doled out by municipalities, public institutions, free dispensaries and the like, is nothing but putting a premium on pauperism and crime. Many are led to beg and become

paupers and criminals as they can get help so easily. Let a person become dependent once, the chances are he will always be more or less dependent, especially, when an ill wind blows ever so lightly. The really needy and most worthy do not apply until they have exhausted all their resources. It is not charity most want, but sympathy and work. Every one able to work ought to be given it at good living wages, according to the services rendered: Those that won't work ought to starve until willing. I believe in giving all worthy, dependent sick, afflicted and helpless the best possible care so long as really necessary; but when a person uses his birthright in riotous living, becomes sick or injured, can be taken to some public institution, and there receive the best care of physicians and nurses with the best of food paid for by the hard-working small home-owner, who can not support his own as well, is robbery of the worst kind. When he is turned loose again he does the same thing knowing he will be cared for as many times as he debauches himself.

All institutions, where pay is taken for care and maintenance, should require and demand something of every one according to his means, no matter how little, and the balance paid by local government, the unworthy and fakirs, just long enough to get them on their feet, then put them to work and make them pay for their whole keep. All able to work, no matter what wages they get, should be compelled to pay a certain per cent. to the government, and their employer compelled to take it out, and pay it to the local government. In that way all would share in the burdens of others. It is a great hardship for the willing and able workers to have to support the great army of paupers, tramps and criminals well able to care for themselves, but who will not work as long as society will support and tolerate them. They are only a menace to society, without one redeeming feature, extracting the life blood of the nation. Just think, 31,000 tramps taken care of in a year in New York State. More nervous wrecks and suicides in the ranks of the willing workers are, not wholly due to their own burdens, but those of the leeches of earth. The old saying, "The world owes me a living, and I am going to have it," is only true so far as you earn it. He that will not work, neither should he eat. "By the sweat of your brow shall ye earn bread," are injunctions that no human power should set aside. I do not believe in the salvation of one, by the damnation of the many.

Prevention of war is a great prevention of disease and death, and hence a very great essential. In war times all the able-bodied men are drawn to be shot down or die of disease, while the diseased, infirm, criminals, cowards, or those who can buy a substitute, are left at home to breed. If a new generation de-

velops hardy, healthy, happy men, the best of the country, a new war must by some pretext be started to kill them off by disease or service. Those no good for any thing or to any one ought to be the first gathered in, forced to the front as a shield and breast-work to protect the genuine army. Then they would go into action with greater love for liberty and country.

Inspection of immigrants, not only at home but abroad, is very essential and should be more rigidly enforced; not alone as to their baggage, moral and physical external condition, but minutely as to their internal conditions. They are capable of sowing the seeds of virulent diseases by their excretions. Let all criminals, paupers, licentious and diseased be excluded forever. We can raise enough of that class.

All domestic animals and their diseases should be carefully studied, and such a thorough knowledge be obtained as will protect the human race from contamination and infection. Our intimacy with them is too close, and the danger too great, not to provide protection.

Sanitation and hygiene carried to the highest proficiency is very essential in preventing disease. Their study should be made obligatory in all schools. Trained specialists should be employed in all capacities that enhance their value as regards the health and life of the race. Every house should have plenty of space, so the sunlight and air could penetrate every room and corner. The distances between them should be according to their height. Dust, dirt and the devil should be carefully excluded. They all defile and death lurks therein. Garbage and other refuse should be made free from noxious germs, or those destructive to man. We must remember that the greater portion of germ life is really life to man. All leguminous plants need bacteria for their perfect and abundant development. Many of the finest products for our comfort and welfare could not exist without them. In fact, life is one grand warfare between constructive and destructive ferments due to bacteria. Pure water should be furnished every individual, no matter where he is. In traveling we are often compelled to take stimulants, as the water is so impure that most believe there is less disease and death in stimulants. The millennium will never come for the temperance people until pure water is every where. Pure food, drink and drugs must be insisted upon if we would prevent many diseases. Physicians must learn to let all such impurities alone, if they would be safe, wise and respected leaders and builders of mankind. Bad examples destroy hope and faith. There are enough pure things in the world, for us all, but we must know what they are and how to keep them pure. If we can only detect and destroy the bad, a great essential is at hand. Purity is the watch word in all depart-

ments of life. If it had always been so, many wrecks along the shores of time, would have been a lasting blessing to mankind and would have been endowed with that vigor and purity God gave to man when He created him in His image.

Unity and organisation in the profession is absolutely essential for vigorous and accomplished prevention. Thanks, that the tendency is in that direction. The more united, the better fed, clothed, happy and contented we will become. Little jealousies, animosities, and derogatory sayings are demoralising and mean trouble, and trouble means defeat. Neither do they elevate the profession. The poorest equipped may give the most learned some points of value. If greater unity and organisation existed, no health department would give their services for the small salary they do, no school inspector would labor for two and six pence a day and find himself. Municipalities are very liberal with their law agents, who try to get or keep them out of trouble, but whose services are not worth the millionth part of the health departments. Yet their meager salary is what it is because physicians have not the backbone and united efforts to enforce their just demands. Governments are willing for a principle to pay 4,000 or more dollars for a fifteen cent law suit, but wish to pay only fifteen cents for their health and life protection. Think of the enormous sums physicians are saving the country by preventive medicine, at the same time taking the bread out of their own and families' mouths. The only case in history where the more proficient a science and art becomes, the less the remuneration. Most any department could be dispensed with better than the health or medical department, yet all other departments of governments get the plums, while the medical get the pits and skins of the diseased fruit. The laborer is worthy of his hire, and as such the physicians should be well paid. If we should act toward each worthy brother in

Seeing only what is good,
Tasting only what is sweet,
Leave the chaff, and take the wheat

We could get any thing demanded for saving the world from disease and pestilence. Who can estimate the value of the medical profession in averting such calamities. Who would not be willing, if properly taught, to pay for prevention from a serious malady, the full price demanded for carrying one through it. Thus avoiding the worries, anxieties, and dangers of the disease. We should work together in a spirit of fellowship and brotherly love, side by side, pulling in the same direction, and at the same time and wondrous results could be obtained.

In working out all the details of preventive medicine, so as to bring it to its highest development; as many or more physi-

cians than now will be required, but they will work more along new lines and receive better rewards; as the state will ultimately pay for all services directly related to the general public health, and in time all physicians will be so remunerated according to their ability, skill displayed and results accomplished. The British Medical Association almost unanimously recommended that all sick persons be treated at public expense, as the physicians would be relieved of the petty worries of fee collection, the stress of competitive commercialism, and the "sweating" of the profession by hospitals, "friendly societies" and similar organisations. So many now are treated at voluntary or state aid institutions. We ought to be remunerated in proportion to our ability to keep the race healthy and vigorous. Lawyers are paid large sums to keep corporations and individuals out of trouble. How much more ought the physicians receive for keeping the health of the community perfect.

All ought to be taught to consult their regular physician at stated intervals to learn if the organs and processes of the body are working normally.

An army of well trained, well paid government investigators are needed and essential, to find out the causes and the best methods of combating diseases. For in knowing causes can only sure prevention result. Investigators who will teach us how to accurately, in each case diagnose diseases in their invasion or incubation stages. More accurate technic, illumined signs, delicate sounds, skilfully made, delicate and accurate instruments, not yet conceived of, whereby we can detect the normal and diseased life processes with readiness and accuracy; which would be as much or more of a revelation than the *x-ray*, the causes of malaria, yellow fever, and the like.

During the present century remedies and methods will be better understood and when applied at the right time will cure or alleviate all diseased conditions. Nothing is impossible. We do not yet know how all the complex problems of life will be solved but we are assured, so long as the world is fit for human habitation, the race is vigorous, healthy and morally clean and reason is not dethroned, new ways and methods will ever be brought to light to aid us in our noble warfare.

Opportunity is waiting and knocking at all our doors, for willing, able, hard-working investigators and applicators, at good livings and more or less renown. We should keep the facts of this poem on opportunity before us:

Maker of human destinies am I;
Fame, love and fortune, on my footstep wait,
Cities and fields I walk;
I penetrate deserts and fields remote,
And passing by hovel and mart and palace, soon or late,

I knock unbidden once at every gate;
 If sleeping, wake; if feasting, rise before I turn away
 It is the hour of Fate, and they who follow me
 Reach every state mortals desire,
 And conquer every foe save death.
 But those who doubt or hesitate,
 Condemned to failure, penury and woe,
 Seek me in vain and uselessly implore,
 I answer not and I return no more.

If we grasp the opportunities as they present, we can make hygiene, sanitation, right-living, pure food and drink properly prepared and all the other essentials necessary for perfect prevention, a great lever to help invigorate and prolong the life and happiness of mankind. If we knew ourselves and how to care for our bodies, very few would die of disease. If the workings of all its minutia were visible and seeing diseases while knocking at its doors, and having a knowledge of how to completely bar the door, would be grand achievements of a life time and fitting monuments for their discoverers.

These investigators will teach us how so to educate our senses, they will become so acute that the very seeing, hearing and touching along with the delicate, simple and accurate instruments and methods, that will be devised, we will be able to diagnose physiological and pathological processes with greater accuracy and much easier than now. We will be able to see the very workings of the individual cells, and distinguish one disease from another in the very beginning of its entrance into the system. With a perfectly developed race, healthy minds in healthy vigorous bodies, we would be able to solve all mysteries. As the new glass recently made at Jena, by using the invisible ultra violet rays, will photograph double the number of stars in the same space as the old glass, and as most of the aniline dyes can now be made by electric chemical action, and numerous other things not dreamed of a few years ago have been accomplished, so will the methods, instruments, glasses and devices discover for us, untold and simple processes of life and death.

If physicians accomplish all they expect in preventive medicine, and mankind learn to treat their fellowmen according to the Golden Rule and the practices and precepts of the Nazarine; wars and pestilence would cease, disease would be eradicated, happiness would be contagious and communicable, worry, nervous prostrations, mental wreckage, suicide and murder would be unknown, life would be prolonged and death only come from age and injury. Death would loose its sting and be swallowed up in victory and be unconscious and joyous as birth.

On Tubal Moles.

[*The Hospital*, December, 1908.]

THE formation of a mole in the Fallopian tube, that is to say the conversion of a tubal gestation into a mass resembling a common carneous mole, is a not infrequent termination of an ectopic gestation. It is a far commoner occurrence than rupture of the tube, and it is quite possible that it happens more frequently even than we know of. It is only in the cases which end by extrusion of the mole from the abdominal ostium of the tube accompanied by peritoneal hemorrhage (tubal abortion) that the condition is evident, though moles are occasionally discovered when an operation is undertaken for "unruptured tubal gestation." The knowledge acquired in recent years of the pathological anatomy of ectopic gestation, and of the method of embedding of the fertilised ovum in the uterus as well as in the tube, has done much to clear up the difficult points in connection with the fate of a gestation sac in the Fallopian tube. Formerly rupture of the tube was looked upon as the usual fate of a tubal gestation, but now we know that this is a comparatively infrequent ending, and that mole formation, with or without extrusion from the abdominal ostium, is the commonest termination.

To understand this conversion of a tubal gestation sac into a mole, we must have a clear understanding of its anatomical relations to the tube. Recent research has shown that the fertilised ovum embeds itself in the wall of the tube in exactly the same manner as in that of the uterus. The early embryo is covered by a sheet of protoplasm, full of nuclei, but devoid of cell divisions, which is known as trophoblast; and having what may be called "phagocytic" powers, the trophoblast eats away the tissues in contact with it. Thus the embryo bores its way into the actual wall of the tube, beneath whose epithelium there is a very thin layer of connective tissue, so that it soon reaches the muscular coats. During this process the embryo and its coverings enlarge, so that the chorionic sac is soon larger than the hole through which it entered the tube wall. Thus the margins of this hole become expanded over the chorionic sac, and a kind of reflexa now known as the "capsularis" is formed. This capsularis may contain muscle fibers, showing that the embryo and chorion have entered the muscle layers. During this embedding process bloodvessels are of necessity encountered, and in general, the eating away of their walls gives rise to the formation of small "blood islands" in the trophoblast itself, completely surrounded by trophoblast, and forming the earliest evidence of a maternal blood sinus, into which the villi afterwards dip. If this process of eating away the wall of the tube goes on suffi-

ently long, it must of necessity happen that the tube wall is at last quite destroyed on one side, and consequently rupture occurs and hemorrhage follows. But before this happens, in the majority of cases the opening up of bloodvessels gives rise to hemorrhage, not only into the trophoblast, but outside its area into the potential space between the advancing trophoblast and the tube wall. This blood coagulates around the villi of the trophoblast, compresses the small amniotic sac and eventually forms an almost solid mass, whose structure is essentially similar to that of a uterine carneous mole.

The great and sudden accession of bulk thus produced in the tube leads to distension and consequent pressure on nerve endings, and is the cause of the premonitory pains in the pelvis which are classical and which herald the final end of the condition. It is this pain together with an unusual lump in the pelvis, with perhaps one missed menstrual period which make up the clinical picture and provide grounds for operations in certain cases. We know very little about the fate of tubal moles which remain *in situ* and do not cause peritoneal hemorrhage. It is highly probable, however, not only that they do occur, but also that after a period of pelvic discomfort they are slowly absorbed, with complete restoration of the tube lumen. The more common fate of a tubal mole, however, is extrusion from the abdominal ostium, or hemorrhage into the peritoneum through the lumen of the tube and formation of a hematocele without actual extrusion of the gestation sac. In cases when the gestation sac is situated in the ampullary end of the tube, the gradual enlargement of necessity opens up the abdominal ostium. Sooner or later the gestation sac must protrude through the ostium, and when the greatest diameter is past the ostium the tube wall retracts by muscular action or elasticity, and the embryo and its coverings are extruded (tubal abortion.) This means separation from its attachments and consequent hemorrhage. The amount of peritoneal hemorrhage in these cases is not nearly so great as in tubal ruptures, and being more slowly poured out forms a localised hematocele around the abdominal ostium (peritubal hematocele). This is the condition so commonly found upon opening the abdomen in suspected cases. The denouement is not dramatic in all cases, as in tubal rupture, but may occur so gradually as to give very few symptoms. The condition then is only diagnosticated after several days or weeks when adhesions have formed, and the hematocele begins to cause pain by pressure and traction, accompanied as a rule by prolonged uterine bleeding. In other cases partial separation of the mole from its attachment cause hemorrhage which may at once find

its way into the tube lumen, and so to the peritoneum, or may track along the muscle layers until it reaches the peritoneum. In this way again a peritubal hematocele may be formed if the blood issues from the abdominal ostium, or a paratubal hematocele if the blood tracks along and perforates the peritoneal coat. It is possible that an embryo may not be wholly separated from its attachments by these accidents, and as a result may be just sufficiently nourished to go on growing. In this case further hemorrhage may occur at a later date, or the embryo, by extending its area of attachment may even go on to an advanced period of pregnancy.

SOCIETY PROCEEDINGS.

The Medical Society of the County of Erie.

Eighty-Seventh Annual Meeting.

REPORTED BY FRANKLIN C. GRAM, M. D. Secretary.

(Carbon copy received January 5, 1909.)

THE eighty-seventh annual meeting of the Medical Society of the County of Erie was held December 21, 1908, in the rooms of the Buffalo Society of Natural Sciences, Public Library Building. The first session was held at 4 o'clock and the second at 8.30 o'clock, p. m., with the president, Dr. Edward Clark, in the chair.

The minutes of the October meeting, also the minutes of the Council meeting held December 7, 1908, were read and approved.

The next order of business being the election of officers for the year 1909, the president appointed Drs. Callanan and Hendee as tellers. The secretary was directed to read the nominations as made at the June meeting.

On separate motions, the secretary was directed to cast the ballot of the society for each of the following officers:

President, Dr. Charles A. Wall; first vice-president, Grover W. Wende; second vice-president, Bernard Cohen.

The president was directed, on motion, to cast the ballot of the Society for Franklin C. Gram as secretary.

Secretary was then directed to cast the ballot of the society for Albert T. Lytle as treasurer.

The president declared each of the foregoing officers to be duly elected for the year 1909.

When the vote was about to be taken for censors, Dr. Henry R. Hopkins arose and stated that he had had the honor of continuously serving on the Board of Censors since January 12, 1868, and that he now desired to be relieved from further duty on this board. Several members tried to urge the doctor to reconsider

his determination. It was intimated that inasmuch as he had served forty (40) years, it would be an exceptional honor to round out a fifty (50) years service. Dr. Hopkins, however, stated that he was fully determined upon his course and would have to decline further service, even if elected. He thanked the society for the expression of good will and for the support given him during his long term of office.

Nominations for censors, in addition to those nominated at the June meeting were then called for by the president, with the result that George L. Brown was nominated. On motion, the secretary was directed to cast the ballot of the society for the following as censors: DeLancey Rochester, John H. Grant, Francis E. Fronczak, Walter D. Greene and George L. Brown. This being done, the president declared them duly elected as censors for the year 1909.

On motion, the secretary was directed to cast the ballot of the society for F. Park Lewis as Chairman of the Committee on Legislation, Ernest Wende as Chairman of the Committee on Public Health, and Thomas H. McKee as Chairman of the Committee on Membership. •

The secretary was then directed to read the names of the nominees for Delegate to the Medical Society of the State of New York for the years 1909 and 1910. Ballot was taken and tellers announced the result as follows:

Those elected delegates are Charles A. Wall, Edward Clark, Thomas H. McKee, Arthur G. Bennett, and Eli H. Long. They were declared by the president, as duly elected delegates to the State Society for the years 1909 and 1910.

When election was called for delegates to the 8th District Branch, Dr. Wall stated that under the new rules adopted by the 8th District Branch, there was no longer any necessity to elect delegates, as the rules make every member of the society a delegate.

Election of officers being completed, Dr. Rochester stated that last year there was a misunderstanding as to whether the delegates to the state society were instructed to present a candidate for the position of president, consequently the presidency of the state society was lost to Western New York; that he has assurances that Western New York can have the presidency this year, if it requests it; and if Erie County unites upon the name of Dr. Stockton, he will be supported by Monroe County and be elected; but if not united upon Dr. Stockton, then Monroe County will nominate a candidate of its own.

On motion of Dr. Hopkins, it was *Resolved*, That the Medical Society of the County of Erie instruct its delegates to present the name of Dr. Charles G. Stockton of Buffalo for the presi-

dency of the Medical Society of the State of New York, and to use all honorable means to procure his election. The resolution was unanimously adopted.

Dr. Wall moved that the by-laws relative to election of new members be suspended and that all elected at this meeting become members January 1, 1909. Carried.

Dr. T. H. McKee, Chairman of the Committee on Membership then presented the following application for membership: Norman K. McLeod, 327 Delaware Avenue, Buffalo; Richard R. Gould, 1673 Broadway, Buffalo; William F. Beck, 1379 Clinton Street, Buffalo; Arthur C. Schaefer, 753 Michigan Street, Buffalo; Alfred H. Noehren, 571 E. Utica Street, Buffalo; Vincent B. Beszczynski, 1016 Sycamore Street, Buffalo; H. W. Cowper, 385 Franklin Street, Buffalo; Harry E. Braner, 201 Maple Street, Buffalo; Leonard Reu, 841 Smith Street, Buffalo; Daniel V. McClure, 799 Elk Street, Buffalo; Hiram D. Walker, 735 Main Street, Buffalo.

Each of the foregoing candidates was individually ballotted for, the secretary being instructed to cast the ballot of the society for each candidate, after which the president declared them duly elected to membership.

Dr. McKee then stated that this makes 59 new members elected during the year, and that 48 other persons had been reinstated to membership, making a total of 107 new members for 1908. This creditable showing called for very complimentary remarks, and a hearty vote of thanks was given the membership committee for its good work during the year.

Dr. Hopkins, Chairman of the Board of Censors, then read the annual report, as follows:

REPORT OF THE BOARD OF CENSORS.

To the President of The Medical Society of the County of Erie:

The censors respectfully report that with distinct satisfaction and encouragement, a review of our work for a number of years reveals the fact that an important change has taken place in public opinion regarding our medical laws, and with greater particularity regarding our medical societies charged with the responsibility of initiating proceedings in cases of violations of those laws.

A few years ago, less than a decade, the work of the censors was made exceedingly difficult, and their most efficient work was made impossible by reason of the almost universal belief that medical laws were for the protection of the medical profession, that such laws were invoked by one set of doctors to annoy or to punish a competitor or rival, and that the real motive of the prosecution in most cases was envy and jealousy on the part of the prosecutor for the superior success of the prosecuted,—the persecuted. For many years, public sentiment and opinion as

indicated by the public press, by the findings in the rooms of our grand and petit juries, in the offices of our district attorneys and superintendent of police, has run in this attitude adverse, through misunderstanding, to medical laws, to medical societies, and to the work of the censors. It is, therefore, with unfeigned satisfaction and hopefulness that your censors report, that the events of the last year demonstrate that public opinion and sentiment as to medical laws has changed, that misunderstanding has given place to right interpretation, that our people now know that our medical laws are in the interest of and for the protection of our most helpless folk,—the poor, the credulous, the ignorant, the sick. The significance of this improved public sentiment and its bearing upon the future of our society and upon the labors of the censors of the coming years, seems to your board hopeful in the highest degree.

In July last, your censors received a letter from the publisher of the *Buffalo Express* enclosing an advertisement from the paper, also a news clipping, asking our opinion as to the accuracy of the statements of both, advertisement and clipping. This advertisement,—that of the Oxygenator Company, E. L. Moses, General Manager, 522 Brisbane Building, Buffalo, N. Y., is a fair sample of the average work of the medical fakir. The promoters of this device took advantage of the presence in the city of scarlet fever, and that in an unusual degree, to scare the public into the purchase of their expensive instrument claiming for it marvelous powers both for cure and prevention.

The moral level of this particular medical fakir was indicated by the fact that he pretended to quote Dr. Gram, of the Bureau of Vital Statistics, as authority for the statement that there had been in our city in June, the last month, 154 cases of scarlet fever, with 34 deaths, the fact being that there had been 154 cases, with four deaths. The same false statement as to the number of deaths also appeared in the clipping. Of course, it was easy to show the publishers of the *Express*, the official statement of Dr. Wende as to the pertinent facts in the case, to prove the abominable falsity of the oxygenators in both clipping and advertisement, and the latter ceased to appear. The significance of this incident is that the publisher of the *Express* voluntarily sought the help of the censors in order that the paper might be free from the responsibility of aiding the nefarious work. Congratulations to the *Buffalo Express* would seem to be in order.

Many of the more successful fakirs use some form or counterfeit of religion both as an advertisement and as a method or means of treatment. Antonius, the boy wonder, was a conspicuous example of this, and there are many others.

About the middle of May last, there came to town a pair of medical fakirs, of the over-developed religious type. These healers advertised themselves as Pope Messiah and Brother Schlatter. They opened an office and prepared for the business of healing for revenue at 77 Swan Street, their last place of business, where it is said they had a miraculous success, having been

at Saint Louis. It should be remarked that the blasphemous conduct of this precious pair of healers, as indicated by their titles was consistently, even extravagantly, supported by their language, manners and clothing,—sacred gestures, sacred vestments,—sacred words were profaned and prostituted to the furthering of their criminal purposes and that systematically and persistently. Here was an admirably devised plan for repeating the years and years of the pecuniarily successful faking of Antonius, the boy wonder, the miracle worker.

The result was quite different. The attention of the censors was invited to the so-called, self-styled Pope Messiah and Brother Schlatter by a reporter from the *Buffalo Evening Times*, with a request for information as to the legal status of these men and their work. The provisions of the law bearing upon the case were cited, the criminal character of the work was pointed out, the nature of the evidence necessary to convict was indicated. The further work of the censors in the case included a call upon District Attorney Abbott and a call upon Superintendent of Police, Regan. The result was that after a stay in town of less than a week, the fakirs were summoned to police headquarters where Brother Schlatter appeared, (the self-styled Pope Messiah having fled the town the previous night), and was ordered to leave town quick.

We get an idea of the pecuniary value to a city like Buffalo of a right judgment as to medical laws, when we contrast the intelligent handling of the fakirs, the self-styled Pope Messiah and Brother Schlatter, with the years and years of immunity enjoyed by the so-called Antonius, the boy wonder, the miracle worker, and the final expense to the county and state incidental to his conviction and imprisonment.

Truly public opinion has grown decidedly from the day of Antonius to the day of Brother Schlatter. Again, sincere congratulations to the *Buffalo Evening Times*, to District Attorney Frank A. Abbott and the Superintendent of Police, Michael Regan, are most emphatically in order.

We have alluded to the exceeding hopefulness of the future of the medical profession as represented in its executive societies, and believe that three features are worthy of your consideration:

(1) The strengthening of our public health law by the enactment of a section as shown in Chapter 344, Laws of 1907, defining in accurate, comprehensive terms what is the practice of medicine, enlarges and makes hopeful the protective work of our society. The medical fakirs and criminals are slow to believe, and find it difficult to accept the sweeping provisions of our present law. However, there is every probability that the courts will sustain these provisions, not only as law, but as law which is both wise and humane.

(2) The government at Washington, on June 30, 1906, approved a law "For preventing the manufacture, sale, or transportation of adulterated or misbranded or poisonous or deleterious foods, drugs, medicines, and liquors." The strong words

in this law are the words "misbranded" and "label", the provision regarding the latter being "Descriptive matter upon the label shall be free from any statement, design, or device regarding the article or ingredients or substances contained therein, or quality thereof, or place or origin, which is false or misleading in any particular."

"The use of any false or misleading statement, design, or device, shall not be justified by any statement given as the opinion of an expert person or appearing on any part of the label, nor by any descriptive matter explaining the use of the false or misleading statement, design or device." "That the term 'misbranded' as used herein shall apply to all drugs, the package or label of which shall bear any statement, design, or device, regarding such article, or the ingredients or substances contained therein which shall be false or misleading in any particular." The law further provides that any person who shall ship or deliver for shipment, receive, sell or offer for sale any misbranded drugs or medicines shall be guilty of a misdemeanor and liable to fine and imprisonment.

The significance of the provisions of our national food and drug act comes to us with greater clearness when we recall the intelligent supervision given to what may and to what may not circulate through the mails.

(3) In the medical law of our state in 1907, most important powers are given to the regents for maintaining discipline in our profession. These powers run in the direction of revoking or annulling license, an enlargement of those previously given. Formerly the regents might revoke a license when the holder had been convicted of a felony; now, power is given to revoke or annul for a wide variety of misconduct.

The significant facts in the new law are the widening of the causes for discipline and the more important provision, that these trials shall take place not before our courts but before a court of medical men, our board of medical examiners. We think we are not unduly optimistic when we declare to you our conviction that the future of the medical profession as to the preparedness of the new members, and as to the discipline of all its members, was never more hopeful than at the present time. During the last year two members of our profession,—Messrs. Turver and Ince,—have concluded their terms of imprisonment in two of our penal institutions; have found their licenses annulled, and have approached the censors with the proposition of an application to the regents looking to a resumption of professional work. The question is one of considerable importance to the applicant and to the profession at large.

It is the opinion of the censors that every such case should be decided only after full hearing, with ample time for preparation, and we recommend that the secretary be instructed to request from the regents notice of at least two weeks in case any person living in this county makes application for license under these conditions.

During the year several complaints have been made for violations of the public health laws, which are now under consideration. The society may expect to hear of them in subsequent reports. Our work has required frequent consultations with our counsel, John Lord O'Brian, and his competent opinions have always been given freely and gladly.

We have also, as in many previous years, received valuable advice, upon many occasions from District Attorney Abbott and from Assistant District Attorney Murphy. The obligations of the medical profession to these gentlemen, we have, on previous occasions, tried to express. We have the profound convictions that these obligations can never be over-acknowledged. Our thanks, as in former years, are due to our efficient Superintendent Chief of Police Michael Regan, his aid and coöperation have been invaluable.

Respectfully submitted,

(Signed) HENRY REED HOPKINS,
JOHN HUDSON GRANT,
FRANCIS E. FRONCZAK,
DELANCEY ROCHESTER,

December 21, 1905.

On motion of Dr. Rochester, the report of the Board of Censors was received and recommendations contained therein were adopted.

Dr. Lytle submitted his annual report as treasurer of the society, as follows:

When elected to fill this important office, I was led to believe it to be a sinecure and a lazy man's job, but upon consulting the bylaws of both the state and county societies, and studying the membership ledger turned over to me by my predecessor, I found that the lazy man's job was a myth, and that if I expected to come anywhere near to doing my duty as Treasurer of the Medical Society of the County of Erie, I would have to get busy.

The membership ledger handed over to me was of the old cumbersome type requiring much time to keep, so, with the permission of the council, a new and shorter system was adopted. The accounts in the old ledger were unbalanced, often simply scratched off with meager entries as to authority for so doing, and many were in dispute, as I discovered later, after protracted correspondence and verbal interviews. State assessments became part of membership obligations in 1906, and the ledger I received showed that 116 members had never paid any state assessments and were owing more or less in back dues to the society, while 24 other members had paid but one state assessment and owed the society more or less dues. Of these 140 members, 96 were owing county dues prior to 1906, anywhere from one to fifteen years.

According to the bylaws, these 140 members were no longer members of the society, but it was assumed that the disturbed conditions brought about by amalgamation of the former association with the society and the union with the state society, all of which, though desirable, were delayed for several years, were the cause of much of the back-sliding on the part of the members. It was thought desirable to make a determined effort to have it out, if possible, with each delinquent member, so a vigorous and protracted campaign was begun, during which, 1,600 pieces of mail were sent out, and, in addition, innumerable telephone conversations and personal interviews were carried on. The results, I think, have been satisfactory, in that the present membership holds open accounts with only 311 members who owe only for 1908, all others having been disposed of as shown in the following table; in that many who felt themselves unjustly dealt with by the society were treated squarely and made loyal; in that many cases of rank unfairness were adjusted; and in that all were awakened to the advantages of and the necessities for active membership in the society.

December 21, 1908.

Mr. President and Fellow Members of the Medical Society of the County of Erie:

Upon taking office in January, 1908, and during the year just ending, the treasurer has charged himself with the following assets of the society:

TREASURER, DR.

Cash received from preceding Treasurer,	\$ 210.06
Accounts received from preceding Treasurer, State....	\$1,047.00
Accounts received from preceding Treasurer, County, .	1,132.75
	2,179.75
Dues and assessments for 1908, due Jan., 1908, State...	813.00
Dues and assessments for 1908, due Jan., 1908, County, .	541.00
	1,354.00
Dues and assessments from new members, State	144.00
Dues and assessments from new members, County....	96.00
Treasurer owing honorary, etc.....	12.00
Total chargeable to December 31, 1908.....	\$3,995.81

During the same period of time, the treasurer has credited himself as follows:

TREASURER, CR.

Orders No. 1 to No. 104, inclusive, distributed as follows:	
State treasurer, direct.....	\$930.00
State treasurer, indirect (rebates).....	192.00
	\$1,122.00
Secretary	184.02
Treasurer	110.03
Censors	104.00
Membership	41.36
Municipal Hospital committee	7.46
Sundry items.....	59.00
Total Cash.....	\$1,627.87

By cancelled dues and assessments:

Death preceding 1908, State	\$72.00	
Death preceding 1908, County	80.00	
	<u> </u>	\$ 152.00
Death during 1908, State	3.00	
Death during 1908, County	2.00	
	<u> </u>	5.00
		\$ 157.00
Resignation, State	153.00	
Resignation, County	130.00	
	<u> </u>	283.00
Reinstatement, State	60.00	
Reinstatement, County	47.50	
	<u> </u>	107.50
Suspension, State	570.00	
Suspension, County	633.75	
	<u> </u>	1,203.75
Dropped for non-payment of dues, 1908		25.00
		<u> </u>
Total cancellation		\$1,776.25
Total cash		1,627.87
		<u> </u>
Total to be credited to December 31, 1908		\$3,404.12
Leaving balance on hand (December 21, 1908)		591.69
		<u> </u>
		\$3,995.81

The Cash Accounts show the following Receipts and Disbursements:

December 21, 1908,

RECEIPTS.

From preceding treasurer		\$ 210.06
From State assessments, back	\$192.00	
From State assessments, 1908	939.00	
	<u> </u>	1,131.00
From County dues, back	253.50	
From County dues, 1908	625.00	
	<u> </u>	878.50
Total		\$ 2,219.56

DISBURSEMENTS

Orders No. 1 to No. 104 inclusive, and as per sheet showing treasurer's credits	\$1,627.87	
Balance cash deposited to credit of Medical Society of the County of Erie	591.69	
	<u> </u>	\$2,219.56

MEMBERSHIP

The old ledger contained a membership record of	480	
For various reasons, there were scratched off	119	
	<u> </u>	
Leaving open accounts		361
Those in good standing January 1, 1908	221	
Those in arrears January 1, 1901	140	
	<u> </u>	361
Reinstated	48	
Suspended	72	
Subsequently reinstated	3	
	<u> </u>	69
Resigned	16	
Dead—from 1 to 6 years	7	
	<u> </u>	140

MEMBERSHIP LEDGER, 1908

In good standing, from old ledger	221	
Reinstated	48	
New members, 1908.....	48	
	—	317
Died during 1908	4	
Removed during 1908.....	1	
In arrears, to be dropped December 31, 1908	5	
In good standing December 31, 1908.....	307	
	—	317

Respectfully submitted December 21, 1908.

ALBERT T. LYTLE,
Treasurer.

The Treasurer's report was received, and the thanks of the society was tendered to Dr. Lytle for the very painstaking efforts he had made in behalf of the society during the year. On motion, the report was referred to an Auditing Committee composed of Drs. Ullman, Bennett and Bonnar, appointed by the president.

Dr. Rochester made a verbal report regarding the subject which had been referred to him at the last meeting, relative to the antispitting ordinance. He stated that, because of the formation of an antituberculosis society which would take up such matters, his committee had dropped the subject. On motion, report was received and committee discharged.

Dr. Grosvenor, Chairman of the Committee on Neurology, presented memorials on the deaths of Drs. Clara E. Bowen, William H. Chase, Edward H. Tweedy, Grosvenor R. Trowbridge, James M. O'Neil, Edward H. Ballou, and Joseph Fowler.

The memorials were unanimously adopted.

Dr. Bonnar, Chairman of the Committee on Municipal Hospital for Infectious Diseases, reported as follows:

December 21, 1908.

To the Medical Society of the County of Erie: The committee of fifteen, of which I have the honor of being chairman, named by your president, following the June meeting of this society, for the purpose of bringing to the attention of the Mayor and Council of Buffalo, the urgent necessity of securing a Municipal Hospital for the care of contagious diseases, are now pleased to be able to report to this society that our efforts have been crowned with success.

Following the appointment of your committee on this hospital question, due attention and study of its duties and responsibilities were given the matter by the members generally, who heartily responded to the call of the chair to attend its various meetings called during the summer months. At the first meeting of the committee in the latter part of July, a sub-committee of three was appointed, which consisted of Dr. DeLancey Roches-

ter, Chairman, and Drs. Hayd and Hanley, who were asked to study the problem as to cost, location and such facilities in other cities at home and abroad. This, they performed with a singleness of purpose, and with such efficiency as met with the hearty approval of the committee of the whole, and I wish to formally express our just appreciation for their valuable data.

In the month of October,—following the harvest vacation of the civic boards,—due notice of our desires and that of many allied civic bodies, was filed with the City Clerk and, in the routine of such business, was referred to the Committee on Sanitary Affairs of the Board of Aldermen. A public hearing was given in due process by this committee. At this hearing many of the members of your committee appeared, also a goodly number of the members of this society lent their presence and moral influence to the furtherance of this subject. Right here, I take occasion to state to this society, what is already well known, that in all the deliberations and practical workings of the committee of this society, we were ably supported by the committee of the Academy of Medicine, consisting of five members, of which Dr. Julius Ullman was chairman.

At the hearings before the sanitary committee of the Aldermen, addresses upon the vital necessities of this proposed hospital for contagious diseases, were made by the president of this body, Edward Clark, myself as chairman of committee, Julius Ullman, DeLancey Rochester, R. R. Ross of the General Hospital, Franklin C. Gram, Charles R. Borzilleri, Henry R. Hopkins, P. W. VanPeyma, and Francis E. Fronczak, Assistant Health Commissioner, who, in the absence of the Health Commissioner, Ernest Wende, filed a letter of the commissioner with the committee on sanitary affairs, giving his views upon the imperative needs for such an hospital to save the lives and conserve the interests of homes in our city.

Supplementing these more purely medical arguments, there were not lacking the civic and material interests of our medical men voiced by those whom I have above named, but also and with much added zeal, from purely civic and humanitarian rights, many representatives of civic associations, as the Manufacturers' Club, United Trades and Labor, East Buffalo Business Men's Association, Cigar Makers' Union, School Principals' Association, Federation of Women's Clubs, Mothers' Club, Nurses' Association, The Medical Clinic (composed of female physicians), Teachers' Association, and other patriotic bodies of our citizens, male and female, whose parental and human sense arose as one voice to demand the earliest possible way of escape from a condition well nigh intolerable in a civilized community. The attendance of our citizens on that and subsequent hearings before the Aldermanic Board and the Council of our city was large and representative of the people as a whole, and demonstrated the patent truth that "where there's a will, there's a way," and what the people really need they can obtain if they are willing to work for it. Another inference is apparent,—namely, it

is always good economy to procure a necessity where means are available.

Before closing this report, I wish to express the hearty thanks of this committee to the many civic bodies which so unselfishly and ably coöperated with your committee in bringing this matter to a conclusion, finally reached by the Common Council and Mayor of this city, to order the draft of a bill by the Corporation Counsel to be presented to the state legislature, to authorise the city of Buffalo to bond itself in the sum of Two Hundred and Fifty Thousand Dollars (\$250,000), to be used in the matter of procuring for our city a Municipal Hospital for the care of contagious diseases.

Feeling gratified at our good fortune and trusting in the full fruition of this most laudable and crying necessity for the efficient care of those afflicted by diseases, not due to any fault of the sufferers, but due, in great part, to just such lack of sanitary facilities for segregating the sick from the healthy, we feel that such outlay, if only to faithfully isolate before the time of contagion was reached, and thus needed by but few of the present numbers, would be such a monument to civic virtue as will redound to the lasting credit of the society and all other bodies of citizens who made this great public necessity their private and public duty to secure.

Respectfully submitted,

Signed by the Committee.

The report was received and filed.

Dr. Ullman said that of the many societies and unions who had helped in procuring the desired results in the matter of contagious disease hospital, Mr. John Hadida, president of the cigar Makers' Union was one of the most active. As Mr. Hadida was present at this meeting, Dr. Ullman desired that the privilege of the floor be extended to him.

The president having granted such privilege, Mr. Hadida made a few brief remarks relative to the subject in which his union was deeply interested. At the conclusion of his remarks, he was heartily applauded.

Dr. Grant moved the following resolution which was unanimously adopted.

Resolved, By the Medical Society of the County of Erie, that, in the interest of the health and morals of the community and the prevention of quackery and deception, the coöperation of the newspapers is requested, in not printing, as advertisements, cure-alls and the like fake medicines. That if in doubt as to the propriety of such advertisements, their representatives consult, before publishing them, the chairman of the board of censors, in order that, if wrong, misleading and deceptive, such advertisements be suppressed.

Dr. Bonnar said that since Dr. Hopkins had worked so faithfully for forty (40) years as a censor, it was due to him, in addition to a hearty vote of thanks which he hereby moved, that the society give some tangible expression of the appreciation of the work which the doctor had done for the benefit of humanity. He, therefore, offered the following resolution:

Resolved, That this society extends a vote of thanks to Dr. Henry R. Hopkins for the faithful services which he has rendered this society and the community as a censor during the forty years just passed; and that the secretary be instructed to convey this expression of appreciation to Dr. Hopkins.

Dr. Wall moved an amendment that the council be directed to procure a suitable gift, in their discretion, in recognition of the services he had rendered the community and that the amount to be used for such purpose be left to the judgment of the council. The amendment was accepted by Dr. Bonnar, and the resolution, as amended, was then adopted.

Dr. Wall presented the name of Dr. Henry R. Hopkins for honorary membership. Under the rules, this must be acted upon by the Council and laid on the table for a future meeting.

On motion of Dr. Briggs, an honorarium of \$100 each was granted to the secretary and treasurer for services rendered.

On motion of Dr. Uilman, the secretary was directed to notify all members of assembly and all senators from this district that they be requested to use all honorable means to secure the passage of the bill for Municipal Hospital for Contagious Diseases.

Adjournment was then taken.

The evening session, which was devoted to scientific purposes only, was called to order by President Clark at 8.30 o'clock, and the following program was carried out:

Ten minute talks as follows:

Roswell Park, The new fulguration treatment of cancer.

Earl P. Lothrop, Papilloma of the bladder.

W. L. Phillips, Treatment of congenital argamblyopia.

E. I. Meyer, Surgical treatment of acute pancreatitis.

L. S. Beals, Lumbar puncture.

N. K. McLeod, Immunity.

At the conclusion of the program Dr. Clark briefly thanked the society for the courtesies extended to him during the year, and he then introduced Dr. Charles A. Wall as his successor.

Dr. Wall was greeted with applause on assuming the chair.

There being no further business, the meeting adjourned.

TOPICS OF PUBLIC INTEREST.

Committee to Fight Tuberculosis in Buffalo is Permanently Organised.

Thomas B. Lockwood Its President—Must have a Hospital—Mayor Adam, It is said, will soon give Hearing on Proposition to Bond the City.

[Buffalo Express, January 5, 1909.]

A REPRESENTATIVE body of men and women which will combat tuberculosis in this city met at the Hotel Iroquois yesterday afternoon and completed a permanent organisation. It will be known as the Buffalo Association for the Relief and Control of Tuberculosis. The meeting was brief and was confined principally to the election of officers and committees.

Several of the delegates present urged that every possible support be marshaled in aid of the movement now on foot for the establishment of municipal hospitals for the treatment of tuberculosis and for infectious and contagious diseases. Some opposition to the movement has developed, it was said. Institutions now in existence claim that they can care for all such cases at a cost of \$10 or \$12. A question as to where and how offered by Dr. John H. Pryor was not answered.

"People who can pay \$10 or \$12 a week don't need a municipal hospital," said Dr. Pryor. "They can go to Colorado or to some other desirable place for treatment. But they are not of the class of people we must reach."

Drs. Pryor, Rochester and Eckel were appointed a committee on hospitals. Mayor Adam, it was stated, would give a hearing within the next two weeks on the proposition to bond the city for \$250,000 for the establishment of two hospitals.

Both Dr. Matthew D. Mann, who presided at yesterday's meeting, and Dr. Pryor were nominated for president of the association, but they withdrew in favor of Thomas B. Lockwood, who was unanimously elected. Other officers chosen were: first vice-president, James Carey Evans; second vice-president, Dr. Matthew D. Mann; corresponding secretary, Irving S. Underhill; treasurer, Harry T. Ramsdell.

Charles B. Sears and Chauncey J. Hamlin were elected a committee on incorporation. Frederic Almy, Dr. DeLancey Rochester and Dr. John H. Pryor were named as a committee on constitution and by-laws, and empowered to enlarge the committee by adding to it the names of representatives of various organisations interested in the movement who were not present yesterday, but who took part in the preliminary meeting on December 10, 1908.

The Mayor's approval of the resolution empowering a commission of seven to make a study of details connected with the construction of the two hospitals was sent to City Clerk Balliett yesterday. The resolution came from the committee on sanitary measures and followed a recommendation by the Mayor. The commission is to consist of the Mayor, Commissioner Ward, Health Commissioner Wende, the president of the Common Council, president of the Board of Aldermen, president of the Board of Councilmen and the chairman of the committee on sanitary measures.

Mayor Adam will call a meeting of the commission as soon as the boards are organized. They will visit other cities to inspect municipal institutions, such as are proposed for Buffalo.

ABSTRACTS.

THE EFFICACY OF THE ANTIGONORRHEIC ARHOVIN.

PROFESSOR W. NAGEL, of Berlin University, from his gynecological polyclinic (*Zeitschrift f. neuere physik. Medizin*, June 1, 1908) says he has used arhovin for three years, with generally favorable results, and considers it indicated in gonorrheal diseases of the genital organs and urinary passages in the dose of two capsules thrice daily. He also employed it in the form of vaginal globules and bougies. Untoward effects from its use never occurred. The duration of the arhovin treatment is, on the average, between two and six weeks. In acute gonorrhea he considers it especially important to have the patient taking arhovin observe the dietetic and hygienic requirements. His most recent observations have certainly confirmed his earlier conclusions. The chief effects of arhovin are secretion limiting and analgesic; the discharge becomes less and the pain on urination disappears. The urine, at first cloudy, becomes clear.

ANUSOL SUPPOSITORIES IN HEMORRHOIDS, ETC.

PROFESSOR H. STRAUSS of Berlin, in a paper on "Proctitis Sphincterica" (*Hufeland'sche Gesellschaft*, May 14, 1908; *Berl. klin. Wochenschrift*, August 3, 1908) recommends a cellulose-free, non-constipating diet to insure feces devoid of coarse and mechanically irritating material. Friction of the feces at the sphincter should also be prevented by injection of oil or introduction of suppositories prior to defecation. In local therapy by means of astringent suppositories he accords the first place to the anusol suppositories. In severe cases, however, special topical treatment (silver nitrate, ichthyol, with the addition of eucain, etc.) is often also necessary.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

All communications, whether of a literary or business nature, books for review and exchanges, should be addressed to the editor, 238 DELAWARE AVENUE, BUFFALO, N. Y.

VOL. LXIV.

FEBRUARY, 1909.

No. 7

Dr. Edward N. Brush's Anniversary Dinner.

MANY friends of Dr. Edward N. Brush, of the Sheppard and Enoch Pratt Hospital of Baltimore, wishing to express their personal regard for him and their appreciation of the great service he has rendered to the public and private care of the insane, recently tendered him a public dinner upon his completion of thirty years of service in the institutions of New York, Pennsylvania and Maryland. The committee of arrangements consisted of G. Alder Blumer, Providence, R. I.; W. A. Paton, Lakewood, N. J.; John B. Chapin, Philadelphia; and Hugh H. Young, Charles M. Franklin, and Henry M. Hurd of Baltimore.

The banquet was served Friday evening, December 11, 1908, in the handsomely furnished dining room of the Baltimore Club. The individual tables were adorned with carnations and the menu was quite elaborate, though the price was appropriately fixed at the modest sum of \$5.00 a plate.

Dr. G. Alder Blumer, of Providence, R. I., presided and introduced the speakers, who were Attorney-General Charles J. Bonaparte, Dr. Ira Rensen, president of the Johns Hopkins University; Dr. George A. Pope; Dr. C. K. Mills, of Philadelphia, and Dr. William A. White, of Washington, head of the Government Hospital for the Insane. A cablegram from Dr. Osler at Paris was read which said: "Greeting to Brush; only gratitude and affection can pay the debt of the profession to him."

The guests, some seventy in number, were nearly all physicians, most of whom were distinguished psychiatrists and the few laymen present were connected more or less directly with the administration of hospitals for the treatment of the insane.

The *Maryland Medical Journal* in its issue for December, 1908, gives an account of the Sheppard and Enoch Pratt Hospital, located at Towson, near Baltimore, of which Dr. Brush is Medical

Superintendent. Incidentally it contains a sketch of Dr. Brush from which we extract liberally.

With their customary circumspection, the trustees sought for medical superintendent the best-equipped alienist to be obtained. Dr. Edward N. Brush, assistant physician at the Pennsylvania Hospital for the Insane, Philadelphia, was selected. A graduate of the University of Buffalo, and at one time lecturer there on electro-therapeutics, Dr. Brush had, after four years of general hospital work and private practice, become interested in psychiatry, and had pursued his studies along this line for nearly seven years as assistant physician in the State Hospital for the Insane at Utica, and then for seven years more had held the same position of responsibility in the Pennsylvania Hospital. He was called in his 30th year, in the full maturity of his powers, to the new work at Sheppard, of which, by the wise determination of the trustees, he was given absolute medical control. Dr. Brush's annual reports show that he at once recognised the opportunity to create at Sheppard a hospital not only in name, but in fact, an opportunity of which the fullest advantage has been taken. In eulogy of one who is still an active participant in medical progress among us we must of necessity be very reticent. A detailed account of his views concerning the treatment of the insane is given in the chapter on hospital care of the insane which he has contributed to Hare's System of Therapeutics. The character of the scientific work done under his direction is well illustrated in the first volume of Medical Reports issued by the hospital in 1903, and containing articles by Paton, Farrar, Dunton and Rusk, all of them at the present time leaders of psychiatric research. Dr. Brush early recognised the opportunities at Sheppard for affording training to young men in psychiatry. In his fourth annual report he says: "As we are able to add to our means of research and to accumulate here a library of reference and gather material for study in the way of clinical, laboratory and pathological notes, we shall attract to the work those who will not only aid in the distinctively medical work of the institution, but will go from here to extend its work in other fields."

Dr. Brush is of the opinion that an air of comfort or even luxury about the hospital has a distinctly curative influence upon such patients. In Hare's Therapeutics, above quoted, he holds that among the special features of hospital care should be mentioned the influence of the institution—the effect of cheerful surroundings, of decorated walls, bright rooms, a pleasant outlook, flowers, books and pictures; in short, what may be termed the esthetic of the patient's environment are all for his good. "I have seen," says Dr. Brush, "the entire character of a ward changed, so far as the conduct of the patients was concerned, by the addition of a large sitting-room, the frescoing of the walls and the instruction of homelike furniture, pictures and books."

In 1882 Dr. Brush visited a number of the asylums and hospitals for the insane of Great Britain, carefully noting details of value for his own work. A report of his visit was made in the *American Journal of Insanity* for January, 1883, and the *Bulletin de la Société de Médecine Mentale de Belgique*. In 1902 he visited some of the best psychiatric clinics of Germany and hospitals of France and Great Britain. A careful analysis of the methods pursued in the German clinics and a comparison of these with our American methods was presented by him in the *American Journal of Insanity* in 1905, and reprinted. He also made visits to Europe with the purpose of studying hospital methods in 1890 and 1896. Last year he went to Amsterdam as a delegate to the International Congress of Psychiatry and Neurology, and took advantage of the opportunity to visit some of the psychiatric hospitals of France and England.

Dr. Brush has been connected with medical journalism during almost his entire professional career. From 1874 to 1879 he was editor of the *Buffalo Medical and Surgical Journal*, and while at the State Hospital at Utica was on the staff of the *American Journal of Insanity*, one of the oldest special medical periodicals in the world. Since 1897 he has again been one of the editors of the *Journal of Insanity*, now the official organ of the American Medico-Psychological Association, and is now its managing editor. Besides being a member of various American medical societies, he is an honorary member of the Medico-Psychological Association of Great Britain and Ireland and of the Société de Médecine Mentale of Belgium, and foreign associate member of the Société Médico-Psychologique of Paris.

What Should We Eat?

THE question of food and drink, the proper nourishment of the body, is one of the most important that can engage the attention of physicians. And, we may add, it is also a subject that may be discussed by the laity with great propriety.

It is not always easy for a physician to obtain respectful hearing when he presents the question of diet to his patients or other audiences, because the listeners are apt to regard the rules laid down as arbitrary, and not always practicable nor even practical sometimes; but once let a magazine article, or an intelligent newspaper editorial appear and an attentive reading will result.

In the last issue of this JOURNAL (January, 1909), Dr. Henry Reed Hopkins presents the topic in a new way, and throws new light on the question of nourishing the body in proper manner. Every physician should pay attention to what Dr. Hopkins says about the mineral nutrients,—air, water, and the salts. While all may not agree with everything Dr. Hopkins asseverates yet enough is presented of value to deserve careful reading and patient following.

From the lay viewpoint many excellent articles, editorial and otherwise, have appeared recently in newspapers and magazines. Seldom have we read one that appeals to common sense in a greater degree than an editorial recently published in the *New York Tribune* (December 6, 1908,) entitled, "The Proper Things to Eat," which we take pleasure in reprinting.

THE PROPER THINGS TO EAT.

One of the questions on which expert opinion has been singularly divided relates to the amount of food required by a man to keep him in working condition. Two or three years ago rather convincing evidence was presented to show that surprisingly little would serve the purpose. To that side of the discussion a valuable contribution was made by Professor Chittenden, of Yale University. In illustration of the doctrine he cited the case of an acquaintance who for more than a year consumed much less than other persons, not only without detriment to his health, but apparently with distinct benefit. The argument was reinforced subsequently by the result of tests of a number of United States soldiers on whom Professor Chittenden was permitted to experiment. Though we are not sure that the New Haven physiologist recommended the selection of simple and possibly uninviting articles of diet, other advocates of a limited indulgence did. To some extent dietetic reformers have minimised the importance of appetite while recommending a diminished consumption.

The other party is now to the bat. One of its representatives, *American Medicine*, in its latest issue declares that the "physiological value of flavor" is not sufficiently recognised. It argues that an appeal to the palate is essential to digestion and that a craving for dainties (though of low nutritive value) is natural. It believes that the inadequacy of plain food is established by the fact that "the lower races," which subsist on plain and unvaried food, are "inefficient workmen," but give a better account of themselves on a richer diet. Possibly *American Medicine* overlooks other explanations of the differences in the quantity and quality of work performed by Europeans and most of the Asiatics. It also seems to ignore the danger that a person in eating things of which he is particularly fond may take more than is good for him. At any rate, the periodical just mentioned is disposed to regard *delicatessen* as "staples" and "luxuries" as "necessaries."

Here you have both sides of the case, and both are partly right. How to support a large family with a small income—to say nothing of loss of employment and unforeseen doctors' bills—is a complicated problem which

millions of fathers and mothers are called upon to solve. Close calculation of the expenditure for the table is absolutely essential to get the best result. Economy there deserves the first consideration, and pleasure must take the second place. On the other hand, even among those of modest means a certain amount of variety in their fare is certainly conducive to wellbeing, and the occasional indulgence in a "spread" even by the poor betrays a craving which may, after all, be entirely normal. Furthermore, it is the testimony of thousands who are so circumstanced that they can put their own useful activities ahead of everything else that generous living is often a help in realising this worthy ambition.

The truth is, no universal rule can be laid down regarding diet. No two persons are constituted precisely alike. One may digest so much more readily than his neighbor that he will get more nourishment from a given quantity of food. Even sipping fluids slowly and chewing solids with deliberation (both commendable practices) will not always establish equality with a person who can safely eat with rapidity. It is a notorious fact, too, that dishes which agree with one person disagree with another. Even the tastes of the same person change from time to time in an inexplicable manner. The wisest plan, then, seems to be for every intelligent person to find out for himself what agrees with him best and so far as is feasible to be a law unto himself. It is to be feared that the only ills which result from dietary mistakes do not come from overeating. There is a necessity for guarding against the excesses of abstinence as well.

PERSONAL.

DR. CHARLES G. STOCKTON, of Buffalo, was elected president of the Medical Society of the State of New York, at its one hundred and third annual meeting held at Albany, January 25-27, 1909. Dr. Stockton is in the prime of active professional life, is Professor of Medicine at the University of Buffalo, and is the most conspicuous representative of what is called nowadays internal medicine, who has been chosen in recent years to this high office.

Dr. Stockton is a teacher of renown, popular with his classes, and thorough in his methods. He is imbued with the science of medicine, and imparts it with forceful epigrams, or extended sentences, as may seem best, but always in graceful English that conveys a lasting impression. He is also an author who employs a facile pen, that gives to a larger audience the benefit of his great

experience in the study of disease and its most skilful method of treatment. The society with its 6,000 members as well as the profession at large is to be congratulated on the selection of such a leader.

THE President closed a conference Saturday, January 23, 1909, with Dr. Albert Ferris, president of the New York State Commission in Lunacy, and Dr. Sydney D. Wilgus, chief examiner of the state board of alienists, relative to the imposition of heavier penalties for bringing insane aliens into the country.

DR. WILLIAM C. KRAUSS, of Buffalo, who has been in California for some weeks will return February 1, and take up his professional work.

DR. AND MRS. F. PARK LEWIS, of Buffalo, will sail late in February for a recreation tour in Europe, returning in May.

DR. ERNEST WENDE, Health Commissioner of Buffalo, and professor of dermatology at the University of Buffalo, is at the Buffalo General Hospital suffering from severe illness. We trust his recovery is to be anticipated at an early day.

OBITUARY

DR. JOSEPH FOWLER, of Buffalo, died at his home in this city December 17, 1908, aged 61 years. He was a graduate of the University of Buffalo (1873), and had practised his profession in this city since that time. He had been ill for several months. He was a member of the Buffalo Academy of Medicine, of the Medical Society of the State of New York, for ten years a member of the Medical Staff of the Sister's of Charity Hospital, for twenty-two years Police Surgeon of Buffalo, and served for three years, from 1881 to 1884, as one of the County Coroners. Dr. Fowler took rank as one of the prominent physicians of Buffalo, was a public spirited citizen, and a man who commanded the respect of the community.

DR. CORNELIUS H. BARTLETT, of Olean, N. Y., died at his home in that city January 22, 1909, aged 83 years. He was one of the best known physicians in the "Southern Tier," having practised his profession in that region for nearly fifty years. He was a member of the Medical Societies of the county and state, and of the American Medical Association. He graduated at Geneva Medical College in 1849. Mrs. Bartlett who was ill with pneumonia at the time of Dr. Bartlett's death survived her husband but two days. A double funeral was held January 26, and both buried in Mount View Cemetery at Olean.

BOOKS AND AUTHORS.

General Surgery. By **Ehrich Lexer**, M.D., Professor of Surgery in the University of Koenigsberg. American edition edited by **Arthur Dean Bevan**, M.D., Professor and head of the Department of Surgery, Rush Medical College, (University of Chicago). An authorised translation of the second German edition by **Dean Lewis**, M.D., Assistant Professor of Surgery, Rush Medical College. Octavo, pp. 1041. With 449 illustrations and two colored plates. New York and London: D. Appleton & Co.

Three elements conspire to make this treatise of value,—author, editor, and translator. The first is a German, hence it may be regarded as an exposition of the status of surgery in Germany. It must be remembered, however, that the editor is one of the leading surgeons in America, hence its adaptation to conditions existing in this country are as complete as may well be made. The translator has made smooth English of the German text.

This treatise, as announced by the editor, is a presentation of the scientific principles upon which the practice of modern surgery is based. Bevan maintains that the subject of general surgery should be studied before the student takes up regional or special surgery, a dictum with which we quite agree. It is on this foundation that the teachings of this book rests.

The work covers a vast field which once mastered equips the student with a knowledge of the fundamentals of surgery, including injuries and their repair, new growths, wound infection, aseptic technic, and everything of importance or value before he takes up regional or special surgery.

It is by far the most striking surgical treatise that has been issued in years; indeed, never before in this country has such an admirable exposition of surgical science been put forth. The editor and all his associates, including the publishers, deserve the thanks of the profession in general for the admirable work he has done in preparing this volume for the American students and practitioners of surgery.

Progressive Medicine, Vol. X., No. 4, December 1908. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by **Hobart Amory Hare**, M.D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia, assisted by **H. R. M. Landis**, M.D. Octavo, 333 pages, with 28 engravings. Lea & Febiger, Publishers, Philadelphia and New York. (Per annum, in four cloth-bound volumes, \$9.00; in paper binding, \$6 00, carriage paid to any address.)

This number deals with diseases of the digestive tract and allied organs, the liver and pancreas, by David L. Edsall; diseases of the kidneys, by John Rose Bradford; surgery of the extremities, tumors, surgery of joints, shock, anesthesia, and infections, by Joseph C. Bloodgood; and genitourinary diseases, by William T. Belfield. A practical therapeutic referendum, by H.

R. M. Landis is added. The digests are well prepared and give essential information on the topics presented. We were greatly interested in the therapeutic referendum by Landis. It contains a vast amount of useful information concerning various drugs and remedies, the serums, the nitrites, and various other treatment aids. The tuberculosis problem receives attention, and in many respects this is one of the better issues of this periodical. It is a most useful book for the general practitioner.

Anatomy, Descriptive and Surgical. By **Henry Gray**, F.R.S., late lecturer on Anatomy at St. George's Hospital, London. New American edition, enlarged and thoroughly revised, by **J. Chalmers Da Costa**, M.D., Professor of Surgery and Clinical Surgery, and **Edward Anthony Spitzka**, M.D., Professor of Anatomy, in the Jefferson Medical College of Philadelphia. Imperial octavo, 1,625 pages, with 1,149 large and elaborate engravings. Lea & Febiger, Publishers, Philadelphia and New York, 1908. (Cloth, \$6.00; leather, \$7.00, net prices.)

Anatomy, formerly considered a "dry" study, has become under the stimulus of more recent authors and teachers, even fascinating. These men have infused the topic with new interest by their methods and works. Gray led the advance in creating a treatise that was both novel and interestingly instructive, and he held the pace during his lifetime. Now his successors, so to speak, Da Costa and Spitzka, have continued the work keeping it well in the lead, as an examination of this edition will show.

One might easily presume the changes since the last edition of this work would be few, but in this edition there have been many alterations, eliminations, and some additions of important anatomical facts, besides changes in and improvements of the illustrations. Gray, always a favorite with students, has been never more so than now. The illustrations are superb, many being in colors, and all sufficiently accurate in detail to depict the parts or structures to the understanding of the pupil. The text, too, is clear and simple, enabling the student to create a mental picture of the structures or tissues described. Taken as a whole, Gray is still one of the best anatomical books for the practical physician.

International Clinics. A Quarterly of Illustrated Clinical Lectures and especially prepared articles on Treatment, Medicine, Surgery, Neurology, Pediatrics, Obstetrics, Gynecology, Orthopedics, Pathology, Dermatology, Ophthalmology, Otology, Rhinology, Laryngology, Hygiene and other topics of interest to students and practitioners. Edited by **W. T. Longcope**, M.D. Volume III, eighteenth series. Philadelphia and London: J. B. Lippincott Co. 1908. (Cloth, \$2.00.)

The subjects considered in this number are treatment, three articles; medicine, four articles; surgery, four articles; gynecology, one article; pediatrics, two articles; orthopedics, two articles; psychiatry, two articles; neurology, two articles;

ophthalmology, three articles; rhinology, one article; and pathology, one article. The most noted contributor is Sir Dyce Duckworth (London), whose lecture on sciatica, however, is short considering the importance of the subject. The most notable article, probably, is that of Jastrow (Univ. Wisconsin), entitled, "On the trail of the subconscious."

The article on chronic milk infection by Richard B. Gilbert, and one on adenoid vegetations in the nasopharynx, by J. Morrison Ray, are worthy of mention. Taken together the book contains much valuable material though its illustrations are not quite up to the usual standard.

Modern Medicine. Its Theory and Practice. In original contributions by American and Foreign authors. Edited by **William Osler**, M.D., Regius Professor of Medicine in Oxford University, England; formerly Professor of Medicine in Johns Hopkins University, Baltimore; in the University of Pennsylvania, Philadelphia, and in McGill University, Montreal. Assisted by **Thomas McCrea**, M.D., Associate Professor of Medicine and Clinical Therapeutics in Johns Hopkins University, Baltimore. In seven octavo volumes of about 900 pages each, illustrated. Volume V., Diseases of the Alimentary Tract. Price per volume: cloth, \$6.00, net; leather, \$7.00, net; half morocco, \$7.50, net. Lea & Febiger, Publishers, Philadelphia and New York, 1908.

This book makes the fifth of the seven volumes promised by the publishers. It deals with diseases of the alimentary tract, and is composed of ten chapters, each prepared by a different author. The first chapter, being an introductory discussion on the diseases of the digestive apparatus, is written by Charles G. Stockton, of Buffalo, than whom none is more competent. Indeed, we could wish that Professor Stockton had not limited his writing to this chapter, but had dealt with diseases of the stomach, functional and organic, and of the intestines. However, this might have interfered with the general scheme of the editor.

The other chapters are written by Reisman, Philadelphia, whose subject is diseases of the mouth and salivary glands; McCrae, Montreal, who presents diseases of the esophagus; Friedenwald, Baltimore, his topic being functional diseases of the stomach; Martin, Montreal, who deals with organic diseases of the stomach; Stengel, Philadelphia, who handles diseases of the intestines; Rolleston, London, who writes of diseases of the peritoneum; Brown, Baltimore, whose topics are splanchnoptosis, enteroptosis, and Glénard's disease; Opie, Baltimore, who discusses diseases of the pancreas; and Kelly, Philadelphia, who considers diseases of the liver, gall-bladder, and biliary ducts.

These several sections are carefully prepared, presenting the topics clearly, and after the most modern thought on the various diseases, relating to cause, pathology, symptoms, diagnosis, course, prognosis, and treatment. It is a fitting companion to the previous volumes in the series.

Pathogenic Microörganisms, including Bacteria and Protozoa. A practical manual for students, physicians and health officers. By **William H. Park**, M.D., Professor of Bacteriology and Hygiene in the University and Bellevue Hospital Medical College, New York. New (third) edition, thoroughly revised and much enlarged. Octavo, 648 pages, with 176 illustrations and 5 full-page plates. (Cloth, \$3.75, net. Lea & Febiger, Philadelphia and New York, 1908.

The author of this work has contributed much to the knowledge of bacteria and protozoa. As director of the research laboratory of the department of health in New York he has studied much, learned much, and imparted much. Whoever is placed at the head of such a laboratory must be competent, and he must work. Park has demonstrated his capacity in this line of research work and, besides, was almost the first to put his work into book form for the benefit of others.

This new edition, the first since three years ago, represents the growth of the subjects during that period, which has been considerable. It has necessitated revision and enlargement, so the book now is increased in size. Subjects heretofore thought but little of, such as the opsonic index, and the bacteriology of the normal intestine are now taken up and considered at length. It is a book for both physician and student in their studies of pathogenic microörganisms, and one of the better of its kind.

Surgical Memoirs and Other Essays. By **James G. Mumford**, M.D., Instructor in Surgery, Harvard Medical School. 12 mo, pp. 358. Illustrated. New York: Moffat, Yard & Co. (Cloth, \$2.50.)

These memoirs embrace a collection of essays, addresses, and classic narratives. They give sketches of Hippocrates, Galen, Vesalius, Ambrose Paré, von Haller, John Hunter and Joseph Lister. Then, under the title "American Surgery," are short biographies of the earlier surgeons in this country. A section deals with the teachings of the older surgeons. An admirable estimate of the life and character of Sir Astley Cooper is next given, which should be read by every junior in the ranks of medicine. Then follow sketches of Sir Benjamin Brodie, John Collins Warren, and Jacob Bigelow.

The remainder of the volume is taken up with Boston medicine one hundred years ago; studies in aneurism; present problems; an address to nurses; the nurses' vocation; and the history and ethics of medicine. Though the grouping is somewhat incongruous, the book is an interesting one and will appeal to every lover of literature pertaining to the fathers of medicine, as well as of medical men of more recent periods.

General Pathology. By **Dr. Ernst Ziegler**, Breisgau. Eleventh revised German edition. Edited by **Aldred Scott Warthin**, M.D., Ann Arbor. Octavo, pp. 801. Illustrated. New York: William Wood & Co. (Cloth, \$5.50.)

Three years ago the eleventh edition of this work left the author's hands, during which time pathological knowledge has

advanced in a marked degree. The editor, therefore, in order to bring the work forward to embrace those facts that have proven of value, has added material in fine print to the paragraphs or chapters where needed. These interlardments include recent observations on the effects of x-rays and on heredity, phagocytosis, opsonins, blood-plates, thrombosis, necrosis, cloudy swelling, fatty degeneration, calcification, regeneration, inflammation, malignant neoplasms, tuberculosis, syphilis, relapsing fever, spirochetæ, protozoa, and the like. Ziegler's pathology has been regarded as a classic so long that it is scarcely possible for the well-informed student to do without it, and with these additions by the American editor it becomes more indispensable than ever.

Gynecology and Abdominal Surgery. In two volumes. Edited by **Howard A. Kelly**, M.D., Professor of Gynecologic Surgery at Johns Hopkins University; and **Charles P. Noble**, M.D., Clinical Professor of Gynecology at the Woman's Medical College, Philadelphia. Large octavo volume of 862 pages, with 475 original illustrations by **Mr. Hermann Becker** and **Mr. Max Brodel**. Philadelphia and London: W. B. Saunders Company, 1908. (Per volume: Cloth, \$8.00; half morocco, \$9.50 net prices.)

The second volume of this colossal work is even more absorbing than the first, which is saying much in its praise. The chapter by Ross (Toronto), dealing with Cesarean and Porro Cesarean section is of first importance. It deals with conditions likely to be met in the lying-in room at any time and it tells of the conditions justifying or rendering imperative these procedures, or operations. With the perfected technic of the present day and operation before the exhaustion of the mother, the maternal mortality is very much reduced and Ross, himself, has contributed not a little to make the reduction in the mortality.

The chapter on extrauterine pregnancy by Williams (Baltimore), is an exposition of this subject from the days when Lawson Tait (1883) first operated for tubal pregnancy, to the present time, complete in detail and instructive in method. Tait's "Lectures on Ectopic Pregnancy and Pelvic Hemotocele," (1888) furnish the foundation for an intelligent bibliography relating to this anomaly of nature, around which has centered whatever knowledge we now possess concerning it.

Only less important, even scarcely so, is the chapter on diseases of the breast, by Bloodgood (Baltimore), in which pathology is given prominence as it should be. All affections of the breast from mastitis to sarcoma are described, treated, and operated in excellent form. Murphy's (Chicago) chapter on intestinal surgery is, like all of his work, splendidly done and profusely as well as graphically illustrated. Kelly, himself, in association with Elizabeth Hurdon, writes of appendicitis and of operations pertaining to its cure. It is needless to add that this chapter is beautifully as well as accurately illustrated.

The chapter on tuberculosis of the peritoneum by Johnston (Richmond, Va.), sets forth the history, clinical picture, and operative treatment of this important malady. He credits Van

de Warker (Syracuse), as first inviting attention in this country to the operative treatment of the peritoneum. His paper was published in the *American Journal of Obstetrics*, 1887. The chapter is most interesting and instructive. The chapters on the surgery of the pancreas (Opie-Watts), on operations during pregnancy, (Norris), surgery of the kidney (Noble-Anspach) and several others of which we would like to make mention, but which, perforce, we are compelled to omit by reason of scant time, are all worthy the highest praise. The book, as a whole, is a valuable contribution to gynecology and abdominal surgery, and will take its place as such in the forefront of literature on those topics.

Operative Midwifery, by **J. M. Munro Kerr**, M.B., C.M., Glas. Fellow of the faculty of physicians and surgeons, Glasgow; obstetric physician to Glasgow Maternity Hospital; gynecologist to the Western Infirmary, etc., with 294 illustrations in the text. New York: William Wood & Company. 1908. (Price, \$6.50 net. Cloth.)

Operative obstetrics is about the only kind of obstetrics men in middle life care to practise. Barnes, in his lectures on obstetric operations, led the way in this kind of literature, and his work may be regarded as a classic. Herman's monograph on difficult labor, coming a few years later, supplied an important link in the chain. But from Barnes to Kerr is a long stride, so many things have happened since the last edition of the former (1886).

Formerly operations on the pregnant or parturient woman were made only under most direful conditions; whereas, nowadays it is almost criminal to wait for extreme indications before surgical intervention is taken. A study of Kerr will engender that courage which always needs support in emergencies. He gives the approved technic of the operations that may be necessary and tells how the diagnosis may be made. The book, therefore, becomes quite as useful to the obstetrician, pure and simple, as to the obstetric surgeon. The former must be able to tell when the operation is needed, even should he not be able to make it himself; he must know that he may send for the surgeon at the opportune moment, before the patient,—the patients,—are beyond surgical relief.

The engravings are graphic, depicting the procedures in most excellent form. The book is a distinct addition to permanent medical literature, and especially to the surgery of midwifery.

High-Frequency Currents by **Frederick Finch Strong**, M.D. Instructor in Electro-therapeutics at Tuft's College Medical School, Boston. With 183 illustrations in the text. Rebman Company, 1123 Broadway, New York.

A reading of this book will benefit every one who does not understand high frequency currents. It contains much of value

relating to electrons, vibration, electrophysics, and various collateral scientific factors pertaining to use of these electric currents. There is nothing new or reliable, however, as to the therapeutic application of this form of electricity. The author starts off with a preface rather high pitched and the entire book overflows with italics and an unnecessary use of capital letters. The printer must have been perplexed with the "copy" and glad when done with it. The author, however, promises a sequel to this book in two years, and then more trouble for the printer.

A Textbook of Physiology. For Students and Practitioners. By **George V. N. Dearborn**, A.M., (Harvard), Ph.D., M.D. (Columbia), Professor of Physiology in Tufts College, Medical and Dental Schools, Boston. Octavo, 550 pages, with 300 engravings and 8 colored plates. Lea & Febiger, Publishers, Philadelphia and New York, 1908. (Cloth, \$3.75 net.)

Physiology next to anatomy lays the foundation of all medical knowledge, all medical skill. This new work by a new author presents the subject in a new form. Dearborn emphasises the mechanism of the sense organs, nerves, and muscles, as the basis of the individual's efficiency. It is believed to be the first textbook of medical physiology to recognise the ever growing insistent demands of the mental process. For these and other reasons the work is especially adapted to the requirements of students as well as teachers of physical education and of psychology. Dearborn presents the topic in an attractive manner, without undue verbosity and is certain to win his way to the very front line of teachers of physiology.

Pathological Technic. By **Frank Burr Mallory**, M.D., and **James Homer Wright**, M.D., Assistant Professors of Pathology, Harvard University Medical School. Fourth edition. Octavo, pp. 480. Illustrated. Philadelphia and London: W. B. Saunders Co. (Cloth, \$3.00.)

This work has been in the hands of the profession, at least that portion interested in pathologic laboratory work, since 1897, during which time four editions have been issued. It was designed as a practical guide to the student in the laboratory and as a reference book for those more advanced; it has kept to these lines in its later editions. It has been revised, enlarged, and improved until now it is about the best known and most valued book of its kind extant. This edition has been revised to meet changes in methods and, likewise, has sustained such additions as are needed to keep it in the advance line of pathologic investigation. The directions for the examination of the dead body are complete and should be followed by post mortem examiners. It is a work that should be found in the hands of every student and teacher of pathology.

The Principles of Pathology. Volume I., General Pathology. By J. George Adami, M.A., M.D., LL.D., F.R.S., Professor of Pathology in McGill University, Montreal. Octavo, 948 pages with 322 engravings and 16 plates. Lea & Febiger, Publishers. Philadelphia and New York, 1908. (Cloth, \$6.00 net.)

It is quite impossible to do adequate justice to this colossal work in the scant space at command in this magazine, with so many books clamoring, so to speak, to be reviewed,—at all events waiting review. It is not difficult, however, to review the author, which is of equal importance, perhaps even of greater moment.

Professor Adami has long been recognised as one of the foremost pathologists of the day, and perhaps it is not too much to accord him first place on the North American continent. Certainly he is the representative Anglo-Saxon pathologist of the present period. It is twelve years since this work was projected and during that time the author has met and overcome obstacles that would have dismayed a less capable man,—a man with less energy and less courage. But Adami had something to say and he has said it in a forceful manner,—in a fashion that will make it a lasting monument to his name.

It is a stupendous undertaking to prepare and bring out a work on general pathology like this one; nevertheless, Adami has succeeded in putting forth what may be regarded, judging by the enormous value of the first volume, as the best English language work on pathology yet printed. It is vastly more difficult to interpret correctly the phenomena of disease, which is the province of pathology, than the phenomena of health which belongs to the field of physiology, to illustrate the difficulties Adami has met and overcome in the preparation of his books, his manuscript had been prepared and all but a few chapters sent to the publishers when, in April, 1907, the medical building at McGill University was burned. The chapters referred to, his library, and the illustrations made or collected for this book were destroyed. One can readily imagine what a blow this was to the author. But in spite of all this, he has produced a wonderful work and the illustrations are well chosen, mostly from other sources.

This author has proved himself a conscientious follower of Virchow in his studies of cell life and cell growth. This is wise, as no better guide in this regard than the great German pathologist has appeared up to the present time. The whole work, indeed, is rather an exposition of ascertained facts, than a propagandist of novel theories.

We could wish that every teacher of pathology would adopt Adami's Treatise as a guide and that advanced students would be sure to make use of it in their further investigations. It is safe and scientific, and redounds to the credit of English speaking investigators. If we mistake not it will be adopted in all the schools of medicine on this side the water as a textbook.

Spectacles and Eyeglasses, their forms, mounting, and proper adjustment, by **R. J. Phillips**, M.D., ophthalmologist to Presbyterian Orphanage, etc. Fourth edition, revised, with 56 illustrations. Philadelphia: P. Blakiston's Son & Company, 1012 Walnut street. 1908. (Price, \$1.00 net.)

A monograph of this kind is useful to the beginner in refraction as it is of convenient form to make of easy reference. Moreover, it is an inexpensive book and new editions, frequently appearing, keep the refractionist promptly advised of the improvements constantly making not only in the methods of proper adjustment of spectacles and eyeglasses, but of the advance in mechanical optics. In this edition we particularly note the description of "invisible" bifocals, and other devices of both benefit and convenience to the wearer of lenses. Phillips is an expert at this work and his book is both practical and scientific.

BOOKS RECEIVED.

Constipation and Intestinal Obstruction (Obstipation). By Samuel Goodwin Gant, M.D., LL.D., Professor of Diseases of the Rectum and Anus, in the New York Post-graduate Medical School and Hospital; attending surgeon for Rectal Diseases at the New York Post-graduate and Saint Mary's Hospital, and the German Polyclinic Dispensary, with 250 original illustrations. Philadelphia and London: W. B. Saunders Company. 1909. (Price, \$6.00 net).

American Practice of Surgery. A complete System of the Science and Art of Surgery by representative surgeons of the United States and Canada. Edited by Joseph D. Bryant, M.D., and Albert H. Buck, M.D., New York. Complete in eight volumes. Vol. IV. Imperial octavo, pp. 1010. Profusely illustrated. New York: William Wood & Company. 1909. (Price, cloth, \$7.00.)

Saunders's Pocket Medical Formulary. With an appendix containing many useful tables, and suggestions for treatment in emergency conditions. By William M. Powell, M.D., member of the Philadelphia pathological society, etc. Ninth edition, thoroughly revised, and enlarged. Philadelphia and London: W. B. Saunders Company. 1909. (Price, \$1.75 net).

Report of the United States Commissioner of Education for the year ended June 30, 1907. Volume II. Washington: Government Printing Office. 1908.

The Urine and Clinical Chemistry of the Gastric Contents, the Common Poisons and Milk, by J. W. Holland, M.D., Professor of Medical Chemistry and Toxicology in Jefferson Medical College, Philadelphia. Forty illustrations. Eighth edition, revised and enlarged. Philadelphia: P. Blakiston's Son & Co. 1908. (Price, \$1.00).

A Textbook of Genitourinary Diseases, including Functional Sexual Disorders in Man by Dr. Leopold Casper, professor in the University of Berlin. Translated and edited by Charles W. Bonney, B.L., M.D., Assistant Demonstrator of Anatomy in Jefferson Medical College, Philadelphia, etc. Second edition revised and enlarged with 23 illustrations and 24 full page plates, of which 8 are in colors. Philadelphia: P. Blakiston's Son & Co. 1909. (Price, \$5.00).

BUFFALO MEDICAL JOURNAL.

VOL. LXIV.

MARCH, 1909.

No. 8

ORIGINAL COMMUNICATIONS.

The Tuberculosis Problem in Buffalo¹

By JOHN H. PRYOR, M. D., Buffalo, N. Y.

A quarter of a century has passed since the medical profession generally accepted the belief that tuberculosis is a curable, preventable and unnecessary disease. Recently the public has been sedulously taught these facts in every state, city and hamlet. Now the people have begun to ask awkward questions. They want to know how much this vaunted knowledge has benefited the mass of consumptives, and the honest answer is very little. They are inquiring insistently why the disease prevails so mercilessly, and why the appalling death rate with its awful results continues almost unabated? This is a tremendously encouraging sign. Education is at last arousing the public and the day of a new form of enlightened endeavor is near at hand.

At the present time there exists a strong probability that the public will assume the great task of checking, and gradually annihilating a communicable disease and its dire effects. There is a prospect that the medical profession will be compelled to perform its full duty or be relieved of its plain responsibility. The burning question today is this, shall the medical profession lead as of old in the crusade against disease or follow in the titanic struggle? For the demand that the frightful suffering, woe and devastation shall cease, and the righteous clamor for adequate protection from an uncontrolled enemy of mankind, will be irresistible in its gathering force. As yet the whole truth has not been told. The grim story of disgraceful neglect and apathy, and the consequent unparalleled hardship of the poor consumptive will sometime be recited in fitting language by the men who have grown ugly while they view the Carnival of Misery and listen to the unnecessary death rattle in the weary victim's throat.

The tuberculosis problem in Buffalo is somewhat dissimilar to that existing in other large cities. There are reasons why the disease can be attacked with greater promise of success than in

1. Read at the Buffalo Academy of Medicine, January 12, 1909.

most large centers of population. The death rate from tuberculosis is comparatively low. The mortality is lower in proportion to the population than most cities of its size. The death rate from tuberculosis, compared with the general death rate, is also surprisingly low in this city. Our climate is evidently maligned because theoretically it should be a powerful predisposing factor in its causation.. These conditions, so pleasant to contemplate, are certainly not due to special efforts intended to check the spread of an infectious disease, because no city of its size in this country has done so little in that direction. In the campaign against tuberculosis it has been a laggard, and smothering and evading facts will not help the censurable situation. We have a small percentage of the submerged. Buffalo is a city of homes and the population is spread over an unusually large area. The tenement house population is comparatively, still a slight and controlled factor. Foci of infection are scattered and easy to locate and control. Unsanitary homes and overcrowding, conditions which make an infected building hard to fight, are the exception here. Fresh air can still be obtained by the vast majority of people, if they have sense enough to desire that seeming necessity of life. Under all the circumstances there should be very little tuberculosis in Buffalo. The physical conditions are not favorable to its spread, and the field for a battle with the monster foe is technically strong. Let us examine the local situation.

During the year 1907, 554 deaths were reported as due to tuberculosis. Of this number 497 deaths were caused by tuberculosis of the lungs, and 57 from other forms of tuberculosis. All statistics of mortality are necessarily more or less inexact. There is opportunity for an error in diagnosis and an unknown number of false returns. Undoubtedly a certain percentage of deaths from tuberculosis are attributed to other diseases of the respiratory tract, particularly pneumonia. The belief is now widespread that the question of life insurance plays a part in causing false returns when tuberculosis happens, unfortunately, to be the cause of death. The actual number of those infected with tuberculosis cannot be known. Although tuberculosis is designated as an infectious disease only a small portion of the cases are reported to the Board of Health. We are compelled to estimate the number of tuberculosis victims by the usual method of multiplying the number of deaths by five. Thus we assume that there are 2,770 people fatally infected to maintain the ghastly number of deaths. If we include all infectious, surgical and medical in character, and could account for those who recover, the number would be much larger. Phillip believes that the number of deaths should be multiplied by at least ten. It seems

fair to state that about one person in each 140 of the population of Buffalo is fatally infected with tuberculosis. It may be mentioned casually that these facts are in strange company with the slogan that tuberculosis is curable, preventable and unnecessary. There must be something wrong somewhere. Now the vast majority of consumptives are attacked during the years of greatest productivity. They succumb to a preventable disease when best prepared to struggle for existence and the welfare of those dependent. It is customary to estimate the loss of wealth to a community by illness and death due to the white plague. Several methods may be employed. They vary in the data included in technic and conclusions. However derived they are startling and are used to arouse the public and stimulate interest in questions of public health. The dose of statistics has been administered also to show that an expenditure to save human beings is a good investment, and also to justify some increased taxation in benighted regions where ideas of false economy prevail. Now the value of a human life cannot be estimated. The loss means one thing to the desolate and grief stricken family and another to the city or state.

There never has been a method devised to measure the incalculable value of character and its influence, though dwelling in the precincts of poverty, and failure to receive an education and a fair chance are inestimable. But from a cold, materialistic, commercial standpoint the average earning power, the loss of an expected duration of life and the cost of illness may form a basis for computing approximately, the loss of wealth caused by tuberculosis in Buffalo. The mean figure according to the method of Newsholme, Fisher, Phillip and Wilcox will be about \$3,500,000 annually. A newspaper announcement that a new factory would be located in Buffalo whose employment would bring 500 workingmen to Buffalo might, perhaps, attract more attention. Would it not be wiser to join in an attempt to save a number of the 500 victims of tuberculosis who live here and would like to stay if they had a chance. I might dwell longer on the economic aspect of this subject if the belief had not grown strong that statistics used to stimulate interest and support will not win in this vast conflict. The people have become accustomed to the story of a terrible hidden scourge and the revelation must be brought closer so that they must see and feel. Appeals to sympathy, justice and fair play will accomplish more. If these are not successful then hard, rough facts must be driven home and clinched until the disgrace and shame cannot be escaped.

Exaggerated statements to show that the prevalency of tuberculosis has declined are sometimes employed to encourage a

hopeful view or used to palliate the effects of stupid apathy. There is room for discussion when the causes of an incontrovertible decrease in proportion to the population is analyzed. That it is due to special preventive measures I refuse to assent. The decline began twenty years before the cause was known and was apparently as rapid during that decade as it has been since. Radical efforts to combat tuberculosis have never been employed but once. That was in Italy in the 15th Century. Suspicion aroused more through prevention than knowledge has accomplished since. This fact is not mentioned to recommend its rejection. It is extremely important at the present time to avoid the misleading conclusion that the actual number of deaths from tuberculosis has decreased. The proportion of deaths to the population has steadily declined but the number suffering from tuberculosis, and the number dying from that disease, is greater than ever before. There is more need of relief and succor because we claim to know how it can be accomplished. There is more intelligence, more people who can help, and more money if it can be reached. A few words concerning the remarkable regularity of the death rate in Buffalo seems necessary to reveal possible methods of attack. I am inclined to believe that the striking uniformity of the figures year after year can be partially explained.

The disease is distinctly endemic and largely due to infection in the home or workshop. To maintain the yearly average there must be four groups, one tottering on the edge of the grave, one advanced, one moderately advanced, and one freshly infected or incipient. For every death there must be one or more recently infected. The ghastly army moving slowly to the grave must be constantly joined by recruits, and the drafting of new victims must be performed with striking accuracy to keep the ranks full. The chance for infection is strangely limited. Immediate and prolonged contact seems to be necessary as a rule. The predisposing causes are not underestimated but the direct source of infection is often overlooked. A dark, overcrowded home is one thing, but insufficient food and poor ventilation with one consumptive in the building is a more important one. Examining those exposed is sure to be one of the most valuable methods we possess, when its importance is fully realised. When there is an advanced case look for an incipient. That is the place to find them and to learn how to detect them. If searched for they will be recognised in at least 20 per cent. of the homes of the poor. The advanced case must lead to the early one and the unwilling victim snatched from the horrid throng. Well what has been done in Buffalo to prevent disease and save life? Tuberculosis has never been attacked or treated as an infectious,

curable disease. It must be only too obvious that the first step would be to locate the sources of infection and control them so far as possible. The consumptive must be found, his location known, and the extent of danger appreciated.

During the year 1907, 520 cases of tuberculosis were reported to the Board of Health, and there were 554 deaths from that disease. An additional number should be added where information was gained by bacteriological examination of sputum. Allow for that additional number and it will be found that in 1907 and 1908 less than one-third of the cases were recorded. Evidently the existence of a case becomes known by the report of a death, and no more will probably be heard from that home until another death occurs. There is fumigation after death and to an unknown extent the danger from further infection may be obviated. But the majority of consumptives communicate the disease before death alone eradicates the danger. This method of control is pursued in many cities and there are many reasons why Buffalo should not be subjected to unjust criticism. A pamphlet with ample instructions for the avoidance of infection has been prepared by the Health Department and all physicians can obtain it. But the Health Department is not supported properly by the medical profession and it can only move a few steps in advance without general co-operation. Under existing circumstances the people must depend upon the physician for information and guidance to secure protection.

Last year I questioned 100 patients in Buffalo who desired admission to Ray Brook, with the object of learning how many had received instructions from physicians concerning methods of prevention. Ninety per cent. of them were certainly expectorating bacilli, as only one out of 23 were incipient cases. Less than one-third had received instruction which could be termed at all adequate for the protection of the family or the public. In not a single instance had members of the family been examined to learn if others might be already stricken with a communicable disease. The results of such conditions are too apparent to call for any comment. Undoubtedly much is demanded of the physician by the public and many times arduous, disinterested work is unappreciated, but nothing draws the line so sharply between commercialism, quackery, and the fads and cults as the unselfish endeavor to promote public health. Prevention can be made effective without inciting hysteria or phthisiophobia or adding hardship to affliction. One of the most hopeful features in the whole problem of tuberculosis is that the victim can be made harmless to others without irksome restraint. In any crusade against tuberculosis the need of hospital facilities for proper care and segregation are so vital that any argument seems unnec-

essary. Newsholme and others have shown conclusively that the death rate declines in proportion to the number of beds provided for special care. To the best of my knowledge Buffalo has the smallest number of beds for consumptives in proportion to its population than any city of its size in this country. Only sixty beds have been provided for years. They are located in an excellent building which constitutes a part of an almshouse. Boston has 770 and 850 more will be provided in the State of Massachusetts. New York City has 1,900 and is adding each year a large number. Chicago has begun the construction of a hospital for consumptives to cost one million dollars, aside from the large number of beds now furnished for consumptives. Buffalo and Erie County have provided a bed for each fifty consumptives. The victim must become a county pauper when he enters the alleged Erie County Hospital for Consumptives. No clever sophistry thus far invented will make him anything else. It is well-nigh impossible to obtain the consent of a patient to go there. There is an excellent medical staff in attendance. Effort after effort has been made to secure reforms, but thus far it has been defeated.

The one agency offered by the county and the city which pays about 85 per cent. of the taxes and is responsible for about 95 per cent of the patients is largely nullified by unfortunate and easily remedied conditions. Each year there is a new excuse for delay and the city seems powerless or too careless to act. Fortunately there are signs that the state will find a way to compel the proper provision for advanced cases and the clutch that has held so long will be made to yield.

The New York State Hospital at Ray Brook has been of great assistance to Buffalo until last summer, and all incipient cases applying for admission had been admitted. To be sure only a small percentage of such cases were detected for various reasons but there was, at least, a place to send them. Now the institution is filled and we are largely deprived of that opportunity for relief. The patient who applies today must wait about three months to gain admission. By that time only a small percentage can be allowed admission under the organic law and in accordance with the definition of the National Association for the Study and Prevention of Tuberculosis. Consequently no place is provided for the curable cases.

Thus far practically all scientific and progressive work in Buffalo has been inaugurated and maintained by private charity. The District Nursing Association by sending nurses and food to the poor sick have reached destitute consumptives who might otherwise have suffered from neglect and absence of any supervision. The Tuberculosis Dispensary established and supported

by the Charity Organisation Society is performing most effective service and the influence is constantly extending. Relief is combined with investigation, control, education and continuous close touch with the patient and his home surroundings. Two of the most commendable features of the intelligent plan in operation are the opportunity offered and grasped to make an early diagnosis and teach the methods employed, and the examination of those exposed. The Trinity Class system working in conjunction with the dispensary supplies the best method of instruction and supervision at present known. The visits of the Dispensary Nurse and the lady in charge of the inspection of the class members completes as perfect a plan as can be devised under existing deplorable conditions. Two things must be remembered: these private agencies only touch a fringe, and while the work is usually quite effectual it is very often made incomplete, or almost nullified at times, by the lack of provision for hospital care.

The history, purpose and results of one summer's trial of a Day Camp will be presented by Dr. Eckel, who deserves high praise for its successful management. It might be mentioned that two of the chief objects sought in establishing the Day Camp was to demonstrate, if possible, that results could be obtained by proper methods in this climate and the need of a municipal hospital located in the vicinity of Buffalo. The results should silence objections that little or nothing could be accomplished in Buffalo. It has been revealed once more that method and discipline form a large part of the hygienic treatment of tuberculosis.

So much for the present conditions and the lack of facilities for a decided advance so marked at this time in other large cities. It is time to consider the question—What can be done?

The time has arrived when an association for the relief and control of tuberculosis can do effective work in Buffalo if adequately supported. Several organisations which have in the past attacked along various lines have joined interests and formed the nucleus for a large representative body, the objects of which are to secure registration and prevention. A municipal hospital and increased provision for advanced cases. The establishment and maintenance of dispensaries, class systems, day camps, increased nursing and visitation among poor consumptives and continued sane education of the public. The degree of accomplishment and the extent of its influence will depend upon a large membership and liberal contributions. The encouraging features which have made a campaign in Buffalo more promising are the immediate probability that registration of cases by physicians will be obtained by the enforcement of law, and the awakening to the lamentable lack of hospital facilities. A state law making registration compulsory was signed by the Governor last May. It

is still inoperative in this city. The blanks containing the information desired have not as yet been furnished by the State Board of Health and the local health department is impatiently waiting for that material. Nevertheless the failure on the part of a physician to report a case of tuberculosis exposes him to prosecution and punishment. Health authorities can also be taken into court for failure to comply with the specifications. When the law becomes operative a question will arise as to the practical value of the mass of material aside from a statistical collection of facts. Not much will be gained if the number afflicted is known unless prevention is more thoroughly introduced. Obviously, the Health Department must utilise the information to check invasion, eliminate danger, and seize the opportunity for investigation and instruction. How this shall be done is a problem worthy of consideration by this Academy. This work, when undertaken, will require a new form of activity in the Health Department and lead to the inauguration of measures which have made New York City famous throughout the world. While experience and reflection makes one wary of a multitude of counsel one positive conviction grows stronger. Prevention will never be successfully employed unless it is associated with humane relief and institutional control for a constantly increasing percentage. It is difficult among the intelligent and ignorant, and impossible in the home of the incorrigible. The long period of exposure, and the numerous chances for a slip are often perplexing elements. It is absolutely successful in a properly managed special institution where precise methods, prolonged training and example lead to the formation of a habit. All cannot go to a hospital and many will not avail themselves of the chance, but the whole question must be settled by the percentage method. We must depend at present almost entirely upon the family physician.

I plead for a municipal hospital for incipient tuberculosis in the vicinity of Buffalo, and increased accommodation for the advanced victims. The need of an institution devoted to the care of the early case is now pressing and imperative. The physician is once more in the humiliating, powerless position of detecting incipient disease while he knows that there is no hope of prompt necessary succor. This condition cannot be tolerated. It is unspeakably brutal, and cruel, and distinctly barbarous from any aspect. The medical profession cannot afford to be silent or evade the consequences for a day. There is a critical emergency and it must be remedied by next spring. We have a unique anomaly in our system of charities by which a class die simply because they are poor. They are denied the benefits of medical

knowledge and I tell you that the depicted results would form the saddest chapter in the history of the age.

Bountiful help flows to the other dependent sick, why not to the consumptive? They are outcasts and deliberately forgotten, and the people can still be happy while they struggle along for three and a half years before death closes the tragic scene. Shall we wait supinely in the hope of future partial relief and argue about the duty of the state and quaint theories concerning taxation which cannot be escaped? Shall the magnitude of the problem frighten and make us falter? It is vastly more colossal and difficult in New York City, but the men there move from one in-trenchment to the other and the battle cry fills the air. Assume that the state should ultimately carry the burden of the care of incipient consumptives, how long must we wait for required benefits? If the institution at Ray Brook could be doubled in capacity by magic tonight it would be more than filled as soon as a proportion of those waiting could arrive within its portals. If the legislature, in its wisdom, should decide this winter to build more hospitals two years would elapse before they would be ready for occupancy.

One institution was established as a model, to teach proper care, demonstrate results, and encourage an early diagnosis. It required four years to fill 164 beds, and there are at least 16,000 incipient consumptives in the state. About 50 per cent. of the patients admitted could be classified as incipient victims. Of these more than 80 per cent. apparently recover, and allowing for the unfortunate conditions which promote relapse about 75 per cent. remain well five years after the date of discharge. The percentage of recoveries in truly incipient cases is almost impossible to determine because they are rarely recognised and correctly advised. The ultimate results and the lasting recoveries will depend largely upon a new form of interest addressed to the patient after discharge. It is time that the method of continual supervision after discharge from a hospital should be made more effective here. There is a strange tendency upon the part of some physicians, while urging the importance of prevention, which is now largely a delusion, to forget that the saving of life is one of the ideal forms. An early diagnosis and prompt relief ensures prevention, when the danger is slight or *nil*, shortens the term when it is necessary, obviates progeny, and at least secures education if the result of treatment should prove disappointing.

The hasty remark is sometimes made that the consumptives are not treated any better than cattle. This is a careless statement. The infected animal is killed to protect others in the herd. Cattle have a palpable commercial value. The state pays the owner

two-thirds of the value of the property destroyed. The whole proceeding touches the farmer's pocket and influences his vote. The human being is not protected from infection. He is allowed a lingering illness undisturbed. The bereaved receives no compensation. The United States Government can be tremendously active when an epidemic of foot and mouth disease is threatening. Thus far the epoch-making meetings of the governors to consider the waste of natural resources have not been marked by any discussion of the loss of life by preventable illness. Yet some humble citizens cling to the idea that the health and welfare of the workers constitute the chief source of natural wealth. Sometime the people will insist upon protection from disease as they do upon protection from crime and fire, but they will have to pay for it.

Some way must be provided to increase provision for the care and segregation of advanced cases in this city. Not alone to diminish infection but to make the gradual decline as easy as possible in accordance with the simple dictates of humanity. The place where relief could be given and accommodation extended indefinitely is at the so-called Erie County Hospital. The increase in the number of beds is now too slow. There is no time to wait for the erection of another almshouse elsewhere. The need calls for immediate action. Ultimately the institution should become a municipal hospital. Any controversy relating to the policy of caring for the incipient or the advanced case seems entirely unnecessary. One plan must supplement the other. It is true that the advanced case in about 50 per cent. of instances is simply the stupidly neglected early victim. He is the result of a sociological blunder but the price of wretched inhumanity must be paid. If we fail to find the consumptive early and reach him with rational help the penalty must be paid by protecting the public and helping the innocent sufferer until he is dead.

Finally, it may be asked, can consumption be conquered in the near future and the wise will not prophesy. A big sociological problem is involved and no one can predict how long the people will slumber. There is sufficient knowledge to wage a most successful campaign, and there can be but one answer to the demand that the unfortunate consumptive shall be treated like a sick human being. The timid and conservative individual is no longer needed in the fight. The place for him is in the rear where his indecisions and whining complaints can be indulged with impunity. If he believes that civilisation will permit the ravages of tuberculosis to continue without a battle let him hug the delusion now and enjoy his antiquated views while he can because the worst days in the conflict have passed and determined, unrelenting progress has begun all along the lines. The

essential need now is money, money, money. It must be wrung from the private purse, the state, the county and the city, and those who have worked and waited for years no longer doubt the outcome.

We have a Governor in this state with remarkable breadth of view and sympathies, keen enough to fathom the depths of cruel misfortune, and he has iron in his blood. The other day he used these words in a clarion call which will ring and echo through the state and arouse the true citizen to action and renewed effort.

With 5,400 deaths yearly outside of Greater New York, it appears that there are only 250 beds for tuberculosis patients. Economy is necessary, but while we are careful and prudent with regard to new undertakings it would hardly seem that we could close our eyes to an obvious duty. Should not private purses be opened in order that suitable provision be made for the poor struck down, not by their own fault, but because of an exposure from which they should have been protected by an enlightened community. Every death from tuberculosis may be said to be a stain upon the honor of the state. Certain it is to the extent to which it might have been prevented by proper precautions against infection.

These quoted remarks apply with singular forcefulness to Buffalo. The stain is large and hideously plain to those who will not refuse to see. Tonight we have exposed some of the ragged edges.

26 LINWOOD AVENUE.

Retroversions of the Uterus.¹

By HERMAN E. Hayd, M.D., M.R.C.S., Eng., Buffalo, N. Y.

POSTERIOR displacements of the uterus are universally recognised as being capable of producing many different and diverse symptoms, either from pressure upon neighboring organs or reflexly upon remote ones. Modern pathology has taught us the importance of recognising these displacements early, since they predispose to structural changes not only in the uterus and its lining membrane, but, by continuity of tissue, involve the adnexa.

In married and child-bearing women these displacements are very common, and are perhaps responsible for more suffering than often results from the more serious diseases of the tubes and ovaries. They are also of frequent occurrence in the young and unmarried. These deviations are no doubt occasionally associated with a defective development of the organ and conse-

1. Read at the Niagara Falls Medical Society January 4, 1909.

quently some of these women are not favorably influenced by any operation which has for its object the mere placing of the uterus in ante-position. Some are due to injuries and accidents during early girlhood and puberty, but the great majority of them are the result of accidents and complications consequent upon infections, childbirths and abortions.

It is fair to assume that a normal uterus with healthy appendages poised in a healthy body should perform its functions in a painless and natural manner and, other than a sense of discomfort, nothing should mark the menstrual crisis. This Utopia of physical development is not often seen, because varying degrees of pain, from slight distress to the greatest agony, is the unfortunate picture of many girls, due to numerous causes, both constitutional and local. Various forms of dysmenorrhea so graphically described by our writers on diseases of women are no doubt due to a misplaced uterus. Perhaps owing to the obstruction it causes to the menstrual flow on account of the flexion but also to the congestion and associated thickening of the endometrium.

There is a popular belief that so-called womb trouble exists only in married women, or women who have borne children or have had miscarriages or accidents of some kind, and I occasionally meet a medical man who is of the same opinion. As a result, young girls and maiden women are permitted to go on suffering for years and often into chronic invalidism without relief. Irreparable diseases of the tubes and ovaries result, and various radical and mutilating operations become necessary. Medical men have shrunk, and with some justice, from instituting vaginal examinations in young women, feeling that such examinations are often unnecessary—as their causes of ill health are more constitutional than local—and that they not only shock the highly sensitive nature of a modest young girl but direct her mind to her genital organs. All this is true, but having once demonstrated that in a particular case the symptoms are either dependent upon or increased and accentuated by a possible posterior uterine displacement, an examination should at once be made by the rectum, and, if such a condition exist, then there is but one course indicated, and that is a curettage and Alexander operation. Since young women can seldom wear pessaries and their displacements are not cured by anything but surgical measures.

In discussing this important question, so far as treatment is concerned, the subject must divide itself immediately into two great classes—retrodisplacements that are complicated, and those that are not complicated—because the treatment involved is definite and scientific as applied to each class, and just as we err in properly interpreting this mode of treatment, so we shall have success or failure. Retrodisplaced uteri are complicated when

there exists marked tubal and ovarian disease; when adhesions bind the uterus to adjacent tissues so that easy, free and complete reposition is impossible; when retraction of the broad ligaments has taken place as a result of a previous pelvic cellulitis or retraction from distorted tubes; in fact, anything which interferes with the normal mobility of the uterus would contraindicate all extraperitoneal surgical procedures. On the contrary, a uterus which is perfectly movable, whose normal excursions are not impeded by retraction of tissue or adhesions to neighboring structures, whose tubes and ovaries are healthy—at all events, not much involved, excepting perhaps in a slight catarrhal or congestive process—and where not more than the first degree of prolapse exists, can be said to be the seat of an uncomplicated retrodisplacement, and this condition can often be relieved and occasionally cured by mechanical measures, such as the use of posture, tampons or pessaries; but when these measures fail, or their continued use is objected to, the retrodisplacement can be permanently removed by a simple extraperitoneal operation, and preferably that devised by Alexander and called after him, which consists—as you all know—in shortening the round ligaments extraperitoneally.

So far as the applicability of the Alexander operation is concerned, the displacement is still uncomplicated even though the uterus be the seat of a severe laceration of the cervix with its associated subinvolution, because the Emmet operation or an amputation of the cervix can be depended upon to cure these complications; in fact, the case may be said to be uncomplicated when the uterus is not seriously involved structurally by neoplasms, degenerations or malignancy. If there be relaxation of the perineum and vagina, with cystocele and rectocele, an anterior and posterior colporrhaphy and perineorrhaphy can be performed at the same time by any reasonably rapid operator without materially increasing the dangers of the operation.

The difficulties of diagnosis in enabling the physician to decide whether a given case is complicated or uncomplicated should not under most circumstances be great, and particularly where the patient is examined under an anesthetic. Pelvic exudates can be felt, enlarged tubes and ovaries can be mapped out, particularly pyosalpinx and ovarian abscess with adherent omentum and adjacent viscera. A uterus, when strongly fixed, should without fear or error be definitely diagnosticated; in other words, all gross pathology can usually be made out by any man of ordinary experience. Sometimes great difficulties in the way of diagnosis occur, and the surgeon occasionally sees a case where there exists slight tubal and ovarian involvement or where long thin and fragile adhesions bind the uterus posteriorly.

but still permit much mobility of the organ, in fact, even permit it to be thrown into quite a degree of anteversion; or the tubes and ovaries can be perfectly healthy, so far as a macroscopical examination can determine, and yet these long and delicate bands of adhesion can hold the upper and posterior surface of the uterus backwards and yet can be stretched out so as to permit it to come so far forward as to be nearly within normal limits. A careful bimanual examination will, however, determine this rare complication—namely, if the hand upon the abdomen, which is forcing the uterus forward, and the fingers in the vagina, which are elevating and releasing the uterus, be both removed, the organ will at once fall back into its previous acquired retroposition; while if there were no adhesions and bands of retraction the uterus would remain indefinitely forward by the intraabdominal pressure.

Again, a uterus will sometimes be so firmly wedged into the hollow of the sacrum that it will be impossible to elevate it until the cervix is forcibly pulled downwards with a volsellum forceps, and the organ manipulated in different directions, when the body hitherto markedly tipped can be easily thrown into extreme ante-flexion. Such experiences I have had, and it seemed impossible to elevate the uterus, and yet when the abdomen was opened, it came forward without any trouble, and it was found with the tubes and ovaries to be normal and healthy. Fortunately these cases are comparatively infrequent, and represent the border line, where any of us will occasionally err; and perhaps we will open the abdomen—as I have done—when an intraperitoneal operation was not necessary; or we may do an extraperitoneal operation when an abdominal or vaginal section was indicated.

For the treatment of complicated retrodisplacements the abdominal cavity must be opened, and whether this be done by the median incision or by the vaginal route I shall not burden you in this paper, nor with the advantages and the disadvantages of these respective methods of operating, because usually each operator chooses the route he can do best work through, and as a result, perhaps, his number of cures is greatest and his mortality least. Whatever method be chosen the uterus must be released, diseased tubes and ovaries must be removed; or treated conservatively in the hope of saving as much of these structures as is possible and consistent with safety and future well-being. Raw edges must be covered over with peritoneum so as to prevent adhesions between raw surfaces; the omentum must be everywhere released, and all ragged and torn portions must be ablated and the bleeding ends carefully tied off.

Pockets of pus must be opened and cleaned out, and perhaps drainage provided for by tube or wick passed anteriorly

through the abdominal wound or through a vaginal slit or opening, and a clean and perfect toilette of the peritoneal cavity be made as quickly as possible. Various methods and devices are employed to keep the released uterus forward. Some surgeons sew the uterus to the abdominal incision, taking in the peritoneum or muscle or fascia, or all three structures in the bite of the suture, and doing what is ordinarily called a ventral fixation and ventral suspension. Others loop up the ligaments and sew the opposed peritoneal surfaces together with silk or chromicised catgut, previously irritating the parts which will touch with 1 to 2,000 corrosive sublimate solution, or gently scarifying the surfaces so as to destroy the smooth endothelial covering. Others loop together the two ligaments in front of the uterus, or sew the loop of each ligament forward by bringing it about one inch from the abdominal incision up through a hole in the rectus muscle, and then fixing it by suture—the so-called Gilliam operation.

All of these measures are reasonably successful, but failures occur and the uterus occasionally falls back, either by the ligaments stretching, or because the adhesions were not strong enough to stand the violent muscular efforts which these parts are subjected to. In a general way it may be stated that a uterus with a healthy tube and ovary should not be fixed forward during the child-bearing period, and if possible, such a uterus when retrodisplaced should be pulled forward by some of these intraperitoneal methods of shortening the round ligaments. Sometimes the uterosacral ligaments can be advantageously shortened, because when they are taut, they tend to pull the cervix upwards and backwards, and thus help to keep up a normal ante-position. If, however, there be marked prolapse, it may be necessary to fixate the organ forward, so as to help to support the vaginal structures below.

Certain operations are performed upon the utero vesical ligaments through the vagina, but I have no experience with that method of correcting retrodisplacements. Another method of treating complicated retrodisplacements is to open the cul de sac and break down any adhesions which exist, place the uterus well forward, and then pack through the opening gauze to hold the organ in place, and to make new adhesions, so that the ante-position shall remain permanent. I have never given this method any consideration, as I am satisfied it is a dangerous procedure and too uncertain in its results; first of all, it is impossible to limit any adhesive inflammation, and secondly, there is no guarantee that these new adhesions will not retract and extend to other adjacent structures and do more harm than good.

Can retrodeviations of the uterus exist without producing any symptoms? I should answer yes, but rarely, and usually sooner or later, a definite train of symptoms will be associated with every retrodisplacement. In fact, I know of no condition capable of masquerading itself in so many different kinds of symptoms and expressions as a retrodisplaced uterus; for not only will there be local symptoms, such as pain in the back and bearing down pains, leucorrheal discharge, increased or diminished menstrual flow, with or without pains, but all kinds of reflex nervous symptoms—headaches, eye troubles, stomach distress and dyspepsia, intestinal indigestion with the allied toxemias, bladder irritation, palpitation of the heart, neurasthenia, hysteria, and all their unhappy and varied symptomatology.

Can a retrodisplacement exist for any length of time and not produce serious tubal and ovarian involvement? Certainly, and I know women, and you have them under your care, who have had retrodisplacements for years and bear children. After each confinement the uterus falls back, and yet the tubes and ovaries remain functionally and structurally well, and I have operated on scores of women who have had a uterine retrodisplacement for years, and who were cured by operative measures and have subsequently borne children, and the uterus and tubes and ovaries have remained in normal condition. However, such uteri are apt sooner or later to be complicated, and for that reason, demand treatment. In some women, the treatment should be energetic, while in others, it may be tentative and watchful. I am certain there exists a large class of suffering women, invalided more or less as a result of uncomplicated uterine displacements, and it is for that class of sufferers I wish to present the results of my experience, and particularly with the Alexander operation, which I have been a constant and continued advocate of in original papers and discussions before medical societies for the past ten years.

In the November, 1904, number of the *American Journal of Obstetrics and Diseases of Women and Children*, is published a paper which I read in St. Louis at the meeting of the American Association of Obstetricians and Gynecologists, in which I detailed the results of my experience with this operation, supplemented with various plastic operations upon the cervix, vagina and perineum, in twelve women, who subsequently became pregnant, and in every one the uterus stood the test of pregnancy and parturition—to one, three children were born; to others, two. In fact, in every case of pregnancy which has followed the Alexander operation in my hands the uterus has remained in position, and I believe that the pregnancy contributed largely to the success of these operations and the general well-being and comfort

of these women. A new uterus was made, muscular tissue in the round ligaments was increased in amount, adhesions to the scar and skin were separated and torn loose as the growing uterus went higher into the abdominal cavity, and after the labor had taken place, a normal involution of all these structures set in, and a natural and satisfactory and happy puerperium resulted.

I have no reason to doubt that many other women upon whom I have done the Alexander operation have also borne children, but these cases I personally confined, or they were confined by my intimate friends, so that I had the opportunity of examining the women repeatedly since their babies came.

Since the above paper was written three or four of these women have borne more children and the uterus is still in perfect anteposition.

I have never failed to find the ligaments, and I am satisfied they are always present; sometimes, however, so small that unless one is skilled in the technic of the operation they would be lost or irreparably broken. The operation as done by me is to pick up the terminal ends of the expanded and spread-out ligament at its origin at the external ring, gradually and carefully pull them together, so as to get a better hold of the stronger and bigger part of the ligament in the canal, and carefully pull it out three or four inches, as the case requires. This traction must be always directed inwards towards the spine of the pubis, or the ligament might be broken if it were pulled outwards against the hard borders of the ring, and it must be strong enough and continued long enough until the body of the uterus can be felt against the abdominal wall; then cut off the frayed and bruised part of the ligaments and fix the stumps to the pillars of the ring. The canal is never opened deliberately, and is only nicked or slightly opened when the ligament does not pull out easily, and the internal ring and the abdominal cavity are never opened under any pretense whatsoever. Failures have occasionally occurred; in my first fifty operations more often than in my next 100 cases, due to inexperience; and I believe, although it is impossible for me to follow all of my cases, as many of them are in the tenement houses of Buffalo, my percentage of returns of the backward displacement is not 5 per cent.

If a thin ligament is met, more care must be taken in the traction, and a support must be worn for some months after the operation. Often the ligament at its pubic end will be as thin as the nerve; in fact one may be in doubt whether it be the nerve we are dealing with, but if it be carefully nursed and followed up into the canal, all difficulty will be removed. And that same ligament, often so thinned out at its origin at the pubis, when pulled out farther will be found to be a good, wholesome band and

capable of enduring any kind of strain when properly and scientifically dealt with.

In some of my early cases I did not use a pessary after the operation, and the displacement recurred; so I now make it a rule to employ a pessary in nearly every case for two, three or four months after the operation, and I see the patients occasionally afterwards if possible, so as to be certain that the ligaments will stand the work imposed upon them after the support is removed. In two unmarried virgin women the uterus fell back, and after a support was worn some months retraction of the ligaments took place, and the uterus has remained in perfect anteposition for years. In other words, a ligament which has stretched out after operation, will often retract as its tissues are young and elastic. Also in two of my cases where pregnancy took place, in one, after the third child, the uterus fell back, and in the other after the fourth child and yet after wearing a support for a few months the uterus remained in beautiful anteposition.

Suppuration occurred frequently in my early operations, but with a better technic and the use of gloves it is seldom or never seen. Catgut and kangaroo tendon are used in all the operations, the former for ligating vessels and bringing the skin together, and the latter for sewing the cut ends of the ligaments to the pillars of the ring, or closing the canal, if it has been opened for any reason, such as a previous complicating single or double hernia. Sometimes a painful scar remains, because the perhaps engaged in the bite of the suture. This can be avoided by a little patience and forethought, but when it exists, it usually is not a permanent affliction, and passes away in a few weeks or months. Sometimes the nerve is torn in the manipulations, but other than a slight anesthesia in the parts for a few months is not a matter of serious inconvenience.

Hernia has never occurred but once in my work, and I see no reason why it should if the canal is not opened, but if from any cause the canal or a portion of it must be opened, if care is taken to properly and carefully bring the edges together, perfect union should take place. The woman should be kept in bed for three weeks after the Alexander operation, and a pessary should be inserted into the vagina after the curettage, or after the operation has been completed, or as soon as the perineum and vagina will permit, if plastic operations have been done at the same time.

In the treatment of old cases of retroflexion greater difficulties are met with than in similar cases of retroversion, because tissue changes have taken place in the uterus at the point of flexion; the anterior wall has been permanently stretched and

the posterior is kinked and hardened, and it is often impossible to keep such a uterus forward simply by traction on the round ligaments. I have in rebellious cases, after a thorough and extremely free dilatation of the cervix, with subsequent curettage, put into the uterus a bent intrauterine stem with a slot on the side for drainage, and I have made the patient wear this for some weeks. It keeps up a continuous and persistent dilatation, and helps the absorption of adventitious tissue. I am satisfied this is a very important matter, because a uterus which has much rigidity left at the point of flexion pulls back, and soon the intra-abdominal pressure is directed on the top and front of the fundus, instead of posteriorly, and thus one of the most important forces in the production and development of posterior displacements is again at work. A stem pessary must always be watched, but when the patient is in bed and prepared most carefully for operation, there is not much danger of infection, and therefore this much-dreaded instrument can be employed with comparative safety, and coupled with the Alexander operation, it accomplishes much even in this difficult class of cases.

Let me now conclude this paper by making these deductions:

1. A plea for the more careful examination of young women by competent and skilled men who can undertake any operative measures that are necessary.

2. Every case of retrodisplaced uterus in the young or unmarried or married woman may not require any treatment.

3. If they produce a definite symptomatology, the Alexander operation should be employed, if the case be an operable one; that is, if the uterus is freely movable and the tubes and ovaries are healthy.

4. Retroversions and retroflexions in the young and unmarried should never be treated by pessaries, but by the Alexander operation. Tampons and pessaries have their place in retrodisplacements in married women or women who have been pregnant, but they accomplish practically nothing in the displacements of young women.

5. The Alexander operation is safe and without mortality incident to the operation, and no harm can come from its proper performance; even if the uterus subsequently falls, the patient is no worse off than she was previous to the operation.

6. It does not in any way interfere with pregnancy and future child-bearing, but on the contrary materially helps the possibility of pregnancy.

7. No pain or distress follows the operation if the case operated upon be properly selected; and if pain and suffering

result, there existed at the time of the operation latent tubal and ovarian trouble, which sooner or later perhaps would have required a radical operation. If it becomes necessary to do a celiotomy on a person who previously had an Alexander operation, the uterus will be found in its normal anteflexed position, which is necessary in every case, whether the tubes and ovaries are removed or not, to insure good health and freedom from future suffering.

8. Complicated retroversions must be treated on general surgical principles and preferably by the abdominal route where the benefit of sight enables us to not only do conservative surgery, but the very best surgery.

493 DELAWARE AVENUE.

The Surgical Idea in Obstetrics

By WILLIAM MORTIMER BROWN, M. D., Rochester, N. Y.

IN choosing the subject of this paper I had in mind to discuss the question of surgical principles in their relation to obstetrics believing, as we must at the present time, that good obstetrical work is dependent on a thorough grounding in the basic principles of surgery. My remarks must necessarily be brief and it is my intention to take up the discussion of special surgical operations in the obstetrical field somewhat superficially and more as a means of illustration and to emphasize the value of good surgical judgment and training in the practice of midwifery.

Realising that the specialist in obstetrics is at best only a consultant and should not be in active competition for normal cases as it is to the general practitioner that at least the normal cases belong and especially in isolated communities, it follows that any advancement or bettering of methods which will result in less morbidity and a lower mortality rate must come from those men, who will avail themselves of the knowledge gained by men who are giving this work definite study and who will apply that knowledge in their daily practice.

Thus having seen that it is the general practitioner, the family physician, the busy man who works all day and often all night, who does the obstetrical work in a community, we realise that if he is any one thing more than another he is an internist rather than a surgeon, consequently the conduct of an ordinary confinement case is usually a surgical procedure done by a medical man if indeed he has not been a midwife.

It is easy, I think, to see why this condition has prevailed. In fact it is the logical development of the conditions along the

1. Read at the forty-first annual meeting of the Medical Association of Central New York, held at Buffalo, October 27, 1908.

lines of our past knowledge, false as we now know much of that knowledge to have been.

Biologically and physiologically speaking, a woman needs no outside aid after pregnancy is established, to reproduce her kind. Primarily, she is able to develop and deliver her offspring.

In primitive times and later under conditions simulating the primitive, and even now in isolated sections where conditions prevail that are of a more or less primitive character, the delivery of woman was or is a matter to which she must attend herself; but in the gradual evolution of social conditions the woman has grown more and more to rely upon outside aid in her accouchement.

From being doomed to solitude during her labor like the Huskie woman of the north, who leaves her hut at the beginning of labor and digs for herself a cave in the snow where she hides until the child is born, the woman in travail was first given the company of her kind with their sympathy and simple ministrations. From this time on the employment of some form of outside aid in various ways during a confinement has progressed through many stages from the members of the family to the officious next door neighbor, to the woman in the vicinity who has had a child and knows it all, to some woman who has seen so many cases that she is able to tell every one else all about it but who usually sits by and does nothing, to the midwife who by virtue of some training was considered to be of great value but whose value was destroyed by the infections she spread in her wake, to the time when the doctor came into the field.

During the time when the woman was her own accoucheur sepsis and accidents of labor were practically unknown, but in the progress of social evolution with its artificial methods of dress and living the woman has been rendered less capable of spontaneous delivery by reason of anatomical and physiological defects which often render outside aid necessary to accomplish the delivery, and with this unnatural method of delivery came the plague of puerperal sepsis and also, because the various mechanical and surgical principles of labor were not as well understood by the doctor as by nature herself an appalling amount of preventable morbidity has occurred.

Dismissing from our consideration the question of restoring woman to her pristine ability of spontaneous delivery it is our purpose to discuss the methods by which we may best meet the conditions now existing, to the end that these anatomical and physiological abnormalities may be overcome with the least resultant injury to the patients, and it is with the development of our surgical knowledge and skill to their highest excellence that we will make our greatest advance.

Professor Dührssen has said that "Advances in obstetrics are to be made only by its thorough saturation with surgical principles."

Technically, surgery has meant a therapy of a distinctly operative kind, but good surgery depends on good diagnosis and when the diagnosis has been correctly made skilful treatment achieves its greatest triumph; just so in obstetrics the correct diagnosis may be followed by skilful operation with a good result, in any event the final care of any obstetrical case is distinctly operative and is surgical in so far as it is anything but obstetrical.

Obstetrics may include at times, nearly every branch of medical science from physical diagnosis on through physiological chemistry and general medicine to the highest development of the surgical art: they may and do each have their fair place in the conduct of a case and each in its place is most essential but in the realm of surgery does obstetrics find its most valued assistant, and let me here emphasize the point that surgery is *only the assistant* and under no circumstances must it dominate the field.

You cannot take from woman, entirely, her function of child bearing and transfer it to the operating table, but as we have noted, there is an increasing proportion of cases abnormal and it is in these cases where good diagnostic and surgical skill will accomplish wonderful results in the preservation of the life and future health of the patients.

The knowledge of bacteriology and the value of strict asepsis in obstetrical work is well known to all and yet it is the trained surgeon who really understands it and who is able to give his patient the real benefit of our knowledge of asepsis or can give the best results when it is necessary to go into the field of anti-sepsis.

The foregoing remarks have their application to the whole field of obstetrical work, the easy normal case as well as the more difficult, but with particular emphasis do they obtain in those abnormal cases which require definite outside aid to accomplish the delivery and in which there is such an element of danger of infection from that cause.

Let us consider briefly some of the most prominent of the surgical operations that have done so much to rid these desperate cases of much of their dread mortal and morbid results.

The use of forceps of one kind or another to aid in the delivery dates from very early times and has been, perhaps, the most beneficent surgical procedure that has ever been adopted for the relief of suffering, but at the same time it has been the source of untold damage to many patients and I cannot make my language too strong to impress it upon you that the obstetri-

cal forceps, in unskilled hands and in the face of dystocia has possibilities of the direst injury and let me urge upon you that unless you are perfectly sure of your diagnosis of the child's position do not apply the forceps. Illustration: A vertex presentation can be delivered face to the pubis but it is usually a crime to do it and if it is done it will be at the expense of the pelvic floor.

Scientific application of the forceps in moderate degrees of dystocia and under conditions of the most rigid surgical asepsis is a most laudable surgical procedure and should be resorted to more often by men who are familiar with good surgical technic and obstetrical mechanics.

The application of forceps at or above the pelvic brim is a difficult and dangerous surgical operation and should be resorted to only subsequent to an accurate diagnosis and by one who is thoroughly familiar with the work and who appreciates the dangers and the difficulties to be overcome.

After the application of forceps the next surgical operation in the obstetrical field in importance and frequency of adoption is internal podalic version.

Version should be done in vertex cases with a floating head where rapid delivery is indicated, and sometimes in the presence of dystocia instead of high forceps. Perhaps its most frequent adoption is in cases of antepartum bleeding. It competes with both high forceps and Cesarean section and sometimes with hebotomy, or may possibly be used in connection with the vaginal cesarean.

Classical Cesarean section, elective, is rapidly becoming the operation of choice in difficult obstetrical work and the indications for its adoption are constantly broadening until now it is done for many lesser degrees of pelvic deformity than was formerly deemed necessary and it is also frequently employed in cases where a rapid delivery is imperative, such as placenta previa, eclampsia, etc. The writer feels very emphatically that an elective Cesarean done under strict surgical conditions is far safer than many of the operations for delivery through the pelvis.

Hebotomy or vaginal Cesarean is indicated with the woman in labor, the head in the pelvis and a condition developed which renders a rapid termination of the first stage of labor imperative. It was first suggested by Dührssen and consisted of two incisions through the lower uterine segment, the application of forceps and an immediate suture following delivery. It has been modified now to one incision in the anterior median line after carefully separating the bladder from the cervix.

The old operation of symphyseotomy has been replaced by pubiotomy or section of the pubic bone just external to the pubic spine and has been proven to be more satisfactory than the older

plan and is indicated in the later stages of labor with the head in the pelvis and a contracted outlet, or perhaps with the head at the brim of a moderately contracted pelvis, if there is a question of any infection of the patient.

666 EAST AVENUE.

Report of a Case of Gonorrheal Arthritis Treated with Antigonococcic Serum

By THOMAS W. PARSCHE, M. D., Chicago.

Mr. A. J. D., age, 24 years, single, stenographer, was first seen at my office January 30, 1908. He stated that he had contracted gonorrhea on December 26, 1907, and had been treated for the condition by a physician, by the injection method, the acute discharge disappearing in eleven days after the onset. On January 15, 1908, he complained of pains in the left knee and consulted his physician. In three days the knee became so swollen and inflamed that he was unable to bend it and had to use crutches. The physician told him that he had gonorrheal rheumatism of the left knee joint and gave him ointments to apply, but the condition resisted treatment.

Status presens.—He complains of a great deal of pain in the left knee joint, has chills and fever, night sweats, poor appetite, constipation, a urethral discharge and a very badly swollen knee joint. He was unable to flex or extend the left leg. Upon physical examination I found that he had a temperature of 102, pulse 112, tongue coated white, chest negative, abdomen negative, discharge from urethra, blood count 12,000. The left knee was greatly enlarged and swollen, measuring in circumference 27 inches at the patella, that of the right knee being 19 inches. The patella was immobile, fluctuation present in the patella and the tibial bursæ and it was impossible to manipulate the joint; flexion and tension were gone. The inflammation extended down to the middle third of the leg. Microscopical examination of the urethral smear showed gonococci present. I advised him to go to St. Joseph's Hospital which he did the following morning.

Treatment.—A plaster cast was applied to the left leg and thigh, the patient was put to bed and placed on a milk diet. Urethral injections of 25 per cent. argyrol were given daily and the internal medication consisted of strontium salicylate grs. 5, every two hours, and oil of santal wood E. I., M 15, three times a day. Codeine phosphate was given at night for sleep. On the second day after the cast was applied the pain became so intense in the knee joint that the cast was cut, forming anterior and posterior splints. The knee was painted with 50 per cent. tincture iodine and again immobilised. At the end of the first week a new cast was applied with a window over the knee joint and hot boric fomentations were applied. During this time the patient was kept on milk diet. At no time was he free from pain which

was so severe that morphia had to be given for relief.

During the next two weeks I applied the Bier hyperemic treatment twice daily. The cupping became so painful and, instead of reducing the inflammatory condition, it seemed to aggravate the condition so, that I had to discontinue it. The evening temperature during this time was averaging 99 degrees F. The urethral discharge had ceased and there were no shreds in the urine.

Dr. Robert H. Herbst very kindly saw the case and recommended the use of antigenococcic serum of Parke, Davis & Co. On February 17, 1908, the patient was injected with 2 cc. of the serum, but there was no reaction. Again, on the following day, he was injected with a like amount, but no reaction followed. After further injection of 4 cc. there was a rise in the temperature of two degrees and he developed urticaria at the point of injection. The dose of the serum was raised to 6 cc., and the reaction was very prompt with an edema of the scrotum. The point selected for the injection was the abdomen. At the end of the first week the pain had disappeared and the swelling was subsiding.

Hot magnesium sulphate fomentations were applied to the knee and 6 cc. of the serum was injected, every second day. On March 7, the swelling had nearly disappeared and he was able to partially flex and extend the knee. The light diet was continued and he was given no red meats. He left the hospital March 14, on crutches and could bear the weight of his body on the left leg.

The serum injection were reduced to 4 cc. every three days until May 12, when he was given 2 cc. weekly until the 1st of July.

Final Results.—July 1, there was perfect motion of the knee joint the swelling had disappeared together with all the pain. Measurements, over the patella, 20 inches. He is able to flex the leg completely on the thigh.

1321 SHERIDAN ROAD.

SYMPTOMATOLOGY OF TUBERCULOSIS OF THE LARYNX.

GEORGE FETTEROLF of Philadelphia, Pa., states the desirability of an early diagnosis in tuberculous laryngitis. This may be made by considering the following symptoms. Changes in the voice, from slight hoarseness to complete aphonia; cough that is harsh and causes little expectoration in proportion to its amount and severity; sputum that is cast off in dry masses in the morning; blood generally comes from the lungs; pain is universal in tuberculous laryngitis, and is often very severe; dysphagia, odynphagia, and dyspnea are sometimes seen.—*Medical Record*, January 23, 1909.

TOPICS OF PUBLIC INTEREST.

How Infection Affects the Body

By STEPHEN SMITH, M.D., LL. D.

[*New York Tribune Sunday Magazine.*]

HOW infection affects the body was the supreme mystery that the scientists of the past strove in vain to penetrate. By no devices of their laboratories could they detect the agents that caused an epidemic. There was only one satisfactory explanation of the origin and spread of the devastating plagues which seemed to fall from the heavens on the people, and that was that epidemics were "a visitation of God" on account of the sins of the people. Of course the only preventive and curative measure available and effectual was "repentance, prayer, and humiliation."

It is a cause of devout thankfulness that while these things were hid from the "wise and prudent" of former times, they have in these latter days been revealed unto "babes." No event in human history would have more greatly taxed the credulity of the most learned and experienced physician of half a century ago than the prophecy that in the early years of the twentieth century school children would be taught by simple and easily understood object lessons how to prevent and how to cure consumption, the Asiatic cholera, yellow fever, and other epidemics that have devastated cities, destroyed armies, and swept from the earth whole tribes of primitive people.

But that prophecy has been literally fulfilled. During the last summer there has been a traveling object lesson that visited the different sections of the State of New York and taught the people, especially the children, all of the essential facts as to the nature of the infection of tuberculosis, its effects on the body, and the methods of prevention and cure.

As infective diseases cause the vast majority of cases of severe and crippling affections and of deaths in every community, the value of a knowledge of the nature of infection and how it affects the body, by the people of all ranks, ages, and conditions, cannot be estimated in its influence on the future of the human race. Already we learn that within the period referred to the sickness and death rates of communities where the people have been most thoroughly instructed as to the nature of infective diseases and how they affect the body, have greatly diminished, and the average of human life has been markedly lengthened. Indeed, it now seems possible to restore the patriarchal age when a man may live to be "an hundred and twenty years old . . . his eye . . . not dim, nor his natural force abated."

To understand how infection affects the body involves an inquiry as to the nature of infection, its mode of entrance into the body, and its operations on its organs and tissues. The terms "infection" and "contagion" are often used as synonymous; but a strict definition according to the medical significance of each limits the former to "the transmission of disease by actual contact of the diseased part with a healthy absorbent or abraded surface," and the latter to "transmission through the atmosphere by floating germs." But in the final analysis the cause of disease in both infection and contagion is so similar in its action that the medical profession has adopted the term "communicable disease" in all cases where the disease is communicated from one person to another by means of a germ, whatever may be its method of attack on the body.

WHAT THE GERM IS.

What is this communicable germ or agent? A bacterium—a little stick, staff—so called from the rodlike shape it assumes in the process of growth. The individual bacterium (plural, bacteria) is an organism representing a low form of vegetable life; resembles mold; in size the smallest living thing that can be seen with the microscope; in masses forms the films floating on foul fluids or covering decomposing animal or vegetable matter. It consists of a single cell, and its mode of increase when placed under proper conditions for growth is by division of the cell body; the two cells formed out of the first being divided into four before complete separation has taken place; the four dividing into eight, the eight into sixteen, the sixteen into thirty-two, and so on indefinitely. Now, as it requires only thirty minutes for one cell to divide, it has been estimated that a single bacterium will in twenty-four hours increase to the number of over sixteen million five hundred thousand, and in forty-eight hours to two hundred and eighty-one million five hundred thousand. At this rate of increase, in three days there would be a mass of bacteria weighing about sixteen million pounds. As the multiplication of bacteria depends upon conditions that soon interfere with or interrupt their growth, as the want of food, their own secretions, and certain natural forces operating against them, these stupendous figures are useful only as an illustration of the enormous fertility of these organisms, and their destructive energy when they attack a susceptible living body.

What is the function of bacteria in the economy of nature? It would be surprising if such a menace to human life as some species of bacteria have proved themselves to be had no other place among the forces of nature than to prevent the too rapid increase of the human race on this earth, as our forefathers be-

beved. It is gratifying, and quite satisfying to a revengeful spirit, to learn from the modern laboratory that the special and only function of the bacterium is to perform the duties of a universal scavenger. It is always seeking decomposing animal and vegetable matter. It lives on filth, riots in it, and dies when deprived of it. It enters the human body only in search of filth, and if it finds none it does the person no harm, and dies either from the want of food or by starvation, or escapes from the body, or secretes itself where it may safely await the creation of decomposing matter, when it will begin its lifework.

Thus, there may be and doubtless is at all times a great variety of bacteria of a virulent type quiescent in our bodies only for the time that they find no decaying matter adapted to their special tastes or wants.

It is a most interesting fact, therefore, that this most deadly foe of man becomes dangerous only when the latter is harboring in his body waste or decomposing matters that are slowly poisoning him. It is in the process of digesting this material that the bacterium excretes poisons—toxins—of the most virulent nature, which are absorbed into the blood of the human victim, creating the condition popularly known as blood poisoning.

Bacteria perform a most important function in the economy of nature: *viz.*, the conversion of decaying and dead matter into food for plants. Biologists assert that without bacteria plant life on the earth would be scanty or entirely wanting; they are the natural intermediaries between plants and animals in point of food production. They are therefore called scavengers, because they live on decomposing matter; but in the very act of digesting such waste they convert it into produces essential to plant life (carbon dioxide and ammonia) and by their excretions restore to vegetation its chief supply of food.

It appears on the same authorities that bacteria not only assist materially in maintaining vegetable and animal life on this planet, but "in the arts and industries they are as essential to modern economic life as are the ingenious mechanical inventions of men. Many secret processes now in use in the arts and manufactures are but devices to harness these natural forces. Thus in the manufacture of linen, hemp, and sponges, in the butter, cheese, and vinegar industries, in tobacco curing, etc., bacteria play an important role.

BACTERIA FOR EVERY CONDITION.

It naturally occurs that to meet the various conditions under which decomposing matter exists in nature there is a great variety of species of bacteria, each species being adapted to a special field of operations. These species are distinguished from one

another by the shapes they assume during their growth, some being rod shaped (the bacillus), others spherical (the coccus), and others spiral (the spirillum). Under one of these divisions the various species are classified.

In these latter days of popular knowledge of scientific progress, but without precise information of details, bacteria are associated in the public mind with disease, especially of the epidemic form. While this prejudice is useful in stimulating the people to adopt and enforce preventive measures against conditions that tend to promote bacterial life in their homes and in their own persons, yet it should be understood that comparatively few of the great number and variety of bacteria are pathogenic, or disease producing, in man.

So throughout the animal kingdom we find that few are susceptible to a common disease; or, in other words, that the same species of bacteria attack with equal force several varieties of animals.

The explanation of this peculiarity is found in the variations of the quality or intimate nature of the tissues and organs of different species of animals. The same may be said of our own bodies,—the several organs vary greatly in their susceptibility to the attacks of the different kinds of bacteria: hence, the latter are classified as specific and nonspecific, according as they cause specific or nonspecific disease.

The distribution of bacteria is limited only by the existence of plants and animals; that is, the existence of decomposing vegetable and animal matter. Though they are more abundant in the earth where such matter is found most abundantly, yet they abound in the air, the water, on plants, animals, and insects, on our own bodies, and in every cavity leading to the exterior. As bacteria are always searching for food, the number present is a sure indication of the degree of cleanliness of the thing, individual, or locality where they are found.

The movements of bacteria from one point to another are through the medium of some other mode of conveyance than their own bodies afford. Thus they are borne by the water, by vegetation, by animals of every kind especially insects, by the air on particles of dust. The typhoid bacillus borne in water and milk has caused innumerable epidemics of that dreaded disease.

THE DEADLY TUBERCLE BACILLUS.

The tubercle bacillus is borne on the air through the medium of particles of dust, and in cities where the victims of tuberculosis scatter these germs profusely in the streets, public conveyances, churches, and places of resort, in the act of coughing, sneezing, and spitting, the dust borne on the winds is a constant

and most fertile source of infection of tuberculosis. In a city like New York thousands are annually infected by the dust borne tubercle bacilli, not only by inhaling them in the street, but even more certainly in the quiet of their homes, where the germ bearing dust accumulates in clothing, bedding, carpets, rugs, and upholstered furniture, and is daily forced into the air of the living rooms by broom and duster.

Foul as is the air of the unventilated tenements of the poor, it has been demonstrated that the dust which saturates the furniture, carpets, rugs, and hangings of the residences of the wealthy contains sixty per cent. of ordinary street filth.

An authority says: "The most widely distributed pathogenic microorganism (disease causing bacterium) in the air is the tubercle bacillus, the cause of consumption and a large variety of other ailments, such as hipjoint disease, caries of the spine, etc. Over one hundred thousand persons die annually from consumption alone in the United States, and it is estimated that there are over two million people afflicted with the disease in one form or another. All of these sufferers are expectorating billions of tubercle bacilli daily."

HOW THEY AFFECT THE BODY.

Considering the second inquiry as to how infection affects the body, we must constantly bear in mind that a bacterium, though a scavenger, is a conservator of nature. Its real function in the orderly processes of animal and vegetable life is to utilise waste for the preservation and promotion of animal and vegetable life on this planet where the conditions are so unfavorable to both.

Therefore, wherever we find bacteria in the active process of growth, that is, multiplication, we may be assured that they have found matter that should be rescued from waste and converted into useful food for plants. It follows that when we find a bacterium actively growing in any part of our bodies, it has found some form of decaying matter that is not only no longer useful to our bodies, but is in fact harmful and should be removed.

It is also important to understand that waste matter is found under a great variety of conditions, and that for its proper conversion into useful food for plants there must be a correspondingly large number of species of bacteria each having its special field of operation. It is due to this variety of bacteria that there are so many infective diseases: for each species of bacteria creates its own individual form of disease.

This statement requires the following explanation; *viz.*, a bacterium in a quiescent state is harmless; everyone has within his body innumerable bacteria, as the tubercle and typhoid bacilli:

but they are inert, and hence innocuous. It is only when they find their proper food, decaying matter, that they begin to multiply, and in that act they secrete a poison, toxin, which is absorbed and, entering the circulation, causes in the individual a special class of symptoms peculiar to that toxin, or poison.

These symptoms constitute a disease, the technical name of which is usually fanciful, depending on some feature of the symptoms, but explaining nothing as to its essential nature.

For example, the typhoid bacillus finds its food in certain minute glands of the small bowels. If these glands are in a perfectly healthy state when the bacillus enters the digestive tract, the germ will pass over them and disappear from the body perfectly harmless. But if the bacillus finds its appropriate food—dead or decomposing matter—in the glands, it at once takes up its abode in them and “begins housekeeping;” that is, it begins to multiply according to the method of fission of its cell and rate of multiplication, already described. During this process the multiplying cells excrete a toxin, which, being absorbed, creates a fever, the result of a true blood poisoning. This fever is called typhoid, because its prominent symptom, stupor, resembles that of typhus fever. The name, therefore, signifies nothing as to the nature of the disease.

KEEP IT OUT OF THE CIRCULATION.

The poisoning of the body by the excreted toxin of the multiplying cells, which is simply plant food, occurs because it is removed only in part by the digestive organs, the circulation that conveys it to the other eliminating organs being efficient for that purpose. Could all of this toxin be removed as fast as it is excreted, and not enter the circulation, there would be no fever.

The termination of this process must be either the death of the colony from exhaustion of the food supply in the glands, or the exhaustion of the patient by the excess of toxins that accumulate in the body. As the activity of the bacillus depends upon the food supplied, the severity and length of the fever varies in different individuals. Some are immune because the glands that furnish the food of the typhoid bacillus are in a state of high health; others have a brief and mild attack, because the food supply is scant owing to a slight impairment of the integrity of the glands; but with a considerable number in every epidemic the food is ample to sustain the creation of an immense colony of bacilli which destroys the victim by an overdose of poison.

The final disposition of the typhoid bacilli after a course of fever, was believed to be by their elimination from the body through the various organs devoted to the discharge of waste products; but recent investigations have proved that the typhoid

bacillus may remain in the body for long periods without apparently affecting the health of the person, but when communicated to another it will cause an attack of fever of the most virulent type. In one instance an outbreak of typhoid fever was traced to a woman who had the fever upward of fifty years ago. It was found that the excretions of her body contained immense quantities of living typhoid bacilli. She was a cook by trade, and it was found on tracing her history that wherever she had worked there had been epidemics of typhoid, beginning at the house where she was acting as a cook.

A still more remarkable feature of the life history of the typhoid bacillus has recently been made public. A typhoid epidemic was traced to a nurse who had attended cases of typhoid fever, but had never suffered from an attack of that disease, and yet was discharging large quantities of the bacilli. These cases can be explained only on the theory that these microorganisms find some place, possibly, as has been suggested, in the gallbladder, where they find food sufficient to keep them in an active state of multiplication, but where the conditions prevent the absorption of the toxins they excrete.

How far these curious incidents in the life of the typhoid bacilli are common to other bacilli is not known; but if it is true of other infectious diseases, the fact will explain the origin of those obscure and mysterious cases that occur without any known exposure to the infection.

AIMS TO DESTROY THE BODY.

In concluding this inquiry as to the nature of infection and its effects on the body, the following statement of a biologist as to the bacterium seems justified: "When it enters a living body, it aims directly at the destruction of the latter. It multiplies rapidly, tends to scatter its broods throughout the tissues, and all the while gives off the most powerful poisons. This agent is wickedly implacable, neither giving or asking quarter. The battle that it wages with the body can terminate only by the destruction of one of the combatants."

Viewed in the light of the past history of infectious diseases, this is not an overdrawn picture. If we estimate the deaths from smallpox in ancient times, from cholera in modern times, and from tuberculosis (consumption) throughout all time, the destruction of human life by bacteria cannot be overstated. The bacterium has been a wickedly implacable foe to the human race in the past. Invisible, intangible, everywhere present, it has proved omnipotent in its destructive attacks upon communities.

But our century opens with a far brighter outlook for the race. Elementary forces which, through ignorance of their true

functions in the economy and conservatism of nature, were permitted in the past to expend their energy in the destruction of life, have been revealed by science to be man's most helpful agents in the promotion of comfort, health, and longevity. Electricity was for ages only a thunderbolt, an object of terror and an agent of destruction, visiting the human residence only to kill its owner and burn the structure.

Today the same natural force is man's most obedient and humble servant, quietly visiting his home to furnish him heat and light, annihilating time in the transactions of business, and transporting him from place to place as on the lightning's wings.

So the bacterium, once the terror of mankind as the invisible and apparently unknowable cause of devastating pestilences, proves to be the useful purveyor of the by-products of its digestion of waste matter which is thereby converted into food for plants. It visits man in the pursuit of its humble calling to obtain his contribution to the sum total of plant food. It searches every tissue, every organ, every recess, however obscure, but so stealthily that its coming and going and its immediate presence are not known if absolute cleanliness of the body exists. It is only when dying tissues or organs, or accumulations of dead matter, are found that its presence becomes known. Even then it would prove harmless and its presence would be unrecognised if its excretions of plant food (toxins), were not necessarily absorbed and did not enter the circulation, thus poisoning the body it is relieving of dead matter.

MAN'S DEFENSES.

Briefly, what are man's defenses against bacteria?

Chiefly two, *viz.*, first, killing it by depriving it of food; and, second, killing it directly by what are known as germicides.

The first method is effected by cleanliness of the person. It may be affirmed that cleanliness, without and within, absolutely protects every man, woman, and child from the most common disease-producing bacteria. It is not sufficient to keep the skin clean by daily baths, while the mouth, nose, throat, and other internal surfaces and organs are covered or filled with effete matter. We must be every whit clean if we would escape the results of the scavenging processes of bacteria of some variety or species.

That condition can be secured and maintained in an organism that itself is constantly decaying in all of its tissues and organs only by strict compliance with the natural laws governing the operations of the body as an independent organism in which all of its forces tend to promote its health and conservation. Every tissue and every organ has its special means of renewal

of its tissue by the removal of dead particles through the outlets and the reception of fresh material through the inlets of the body. Waste and supply are exactly balanced, as in the most precise and delicate machine. If the outlets become clogged so that all the waste cannot escape at the proper time, dead matter, the food of bacteria, begins to accumulate, and disease must be the result.

In the same manner, if the food is in excess of the demands, or of a quality not suited to the needs of the tissue or organ, waste begins to accumulate, bacteria swarm in the decomposing mass, and emit their toxins, which, absorbed into the circulation, cause a variety of physical disturbances according to the species of bacteria present, and the particular tissues the toxins affect, as the nervous system, stomach, heart, kidneys, etc.

That even the most feeble minded may be able to regulate their habits so as to secure an adequate supply of food both in quality and quantity, and the prompt removal of waste matter, so as to secure that degree of cleanliness of internal organs essential to escape from bacterial attacks, the mechanism of the body is endowed with instincts that make it automatic in its action. Such are appetite and taste for food and drinks; the desire for exercise, rest, and sleep; the impulse of the organs in an active state; etc. It is only when these natural monitors are interfered with that the mechanism begins to fail in its elimination of waste, and bacteria find the conditions favorable for their functional activity.

DESTROY THE BACTERIA.

The second defensive measure is the destruction of the bacteria by means of agents that will destroy the microorganism before or after its entrance into the body, but without injuring the healthy tissues. There is a great variety of these agents of more or less power, and they are used in the form of gases, liquids, and powders, according to conditions existing in individual cases. In general, it may be advised that, as bacteria are everywhere, germicides ought to be used far more extensively than they are for the purposes of securing not only the direct destruction of bacteria, but of removing or neutralising dead matter, the food of bacteria. So minute are bacteria, and so adherent are they to material things, that mere bathing with water does not remove them, medicate it as we may with fancy soaps. There should be used in addition a more penetrating and destructive agent, which would not only destroy all forms of bacteria, but at the same time secure absolute cleanliness.

ABSTRACTS.

Anusol for Hemorrhoids

COPROLOGICO-CHEMICAL studies of hemorrhoidal cases were made by Dr. Freiherr von Oefele, of Neuenahr (*Deut. Aerzte-Zeitung*, November 15, 1908), in which he says that hemorrhoids and constipation by no means always go hand in hand; rather are they apt to exclude each other. For hemorrhoidal patients feel the passage of feces so severely, because of the anal distention caused thereby, that they persist in the use of purgatives until they attain very soft feces. Even these, however, arouse a most unpleasant sensation and a subjective feeling of constipation; but analysis of the feces will show a deficiency of solids and a large percentage of moisture. Generally speaking, a patient with hemorrhoids uses purgatives more than is good for him, as this involves waste of unutilised nutriment.

The layman is also under the impression that the uses of suppositories, such as anusol, causes softening of the feces, because defecation is rendered so much easier. This, however, is not the case, and is a factor in their favor. Thus in one case the solid contents were 5.48 per cent., and under anusol treatment rose to 7.68 per cent., later falling to 5.50 per cent. Under the subsequent use of one anusol suppository every week there was a defecation morning and evening—an improvement over the previous diarrheic condition of the patient. Generally, he found the dry contents of stools to rise under anusol treatment, but, as stated above, the relief from straining passages causes the patients to think that the stools had been softened by the suppositories. A decrease in the quantity of feces, noted by some patients, is explained by the desiccant action of the remedy and the diminution of mucosal secretion in the intestine.

During hemorrhoidal bleeding the ash contents of the excrements generally sink far below normal. Von Oefele made coprological examinations during periods without marked bleeding and therefore of feces having favorable ash contents. In these, use of anusol suppositories increased the ash contents in ten out of fourteen cases.

In hemorrhoidal subjects a large portion of the fecal ash is water-soluble, while in healthy persons only a small part is soluble in boiling distilled water. Two patients, whose stools showed especially unfavorable solubility, were treated with anusol suppositories. In one, whose soluble ash was equal to the insoluble ash, the former fell 13 per cent. in seventeen days. In the other the soluble ash contents was 45 per cent. greater than the insoluble, and after four days of anusol the former fell 14 per cent. below the latter, and finally to 67 per cent. less—a total fall to

less than one-fourth of the original amount. He thus found that in hemorrhoidal patients treated with anusol the pathological excess of soluble ash decreases, and this decrease is a definite one.

The malproportion between soluble and insoluble ash is especially great in severe hemorrhoids. For in the healthy subject the chief portion of the katabolic products yielding insoluble ash is excreted by the colon, while the portion yielding soluble ash is eliminated by the kidneys. But in hemorrhoidal disease the local conditions and the fecal examination show that the affected colon is impaired in its ability of eliminating insoluble materials. Moreover, in hemorrhoids, undigested nutriment and blood and mucus are freely present; and these contain abundant soluble mineral substances and very little insoluble ones.

Before use of anusol suppositories the feces frequently contained epithelia and mucous shreds. These constituents lessened and were often superseded by mucous flakes. The healing process in the depths of the mucosæ began; there was a mobilisation of leukocytes, sometimes evidenced by their appearance in the feces; and the products of the chronic catarrh disappeared,—so that coprological examination gives results, on the basis of which the use of anusol suppositories in hemorrhoidal conditions appears commendable.

Urotropin in Scarletinal Nephritis

A. SEIBERT, M.D., Professor of Pediatrics at the New York Polyclinic School and Hospital, reports (*New York Polyclinic Journal*, October, 1908), says he has used urotropin for the last two years with marked success, and relates his gravest case:

Female, age 11, became ill on April 2 with mild scarlet fever followed by multiple arthritis during second week of illness, and nephritis in third. May 12, two long attacks of severe uremic convulsions; during one of these, venesection. In preceding twenty-four hours four to five ounces of urine; albuminuria moderate. He took charge of case May 13, at the end of sixth week, universal edema, most marked in face; some ascites; marked pallor of mucous membranes; pulse, 48; threadlike, intermitting at every third beat; semiconscious; tongue covered with fungus; flat ulcerations in mouth with intense fetid oral odor; uremic amaurosis for five days; nausea and incessant vomiting even of water for ten days, necessitating rectal feeding.

In determining the cause of the extreme heart weakness, myocarditis was excluded by the fact that the child had outlived the two protracted convulsive attacks. The only alternative was that the uremic poison which had blinded the child was also depressing the nerve centers regulating heart action. Therefore all

efforts were at once directed to the kidneys. Wet hot packs, colon flushing, diuretics and other measures had failed. To save the threatened life, the organisms which had invaded the kidneys had to be destroyed. Five gr. urotropin, dissolved in 1 ounce cold water, containing 15 drops dilute HCl, were given. Had this been vomited, a 2-gr. urotropin solution would have been given hypodermatically, though this has not been done hitherto; but the HCl stopped the vomiting. A small meal was retained.

The medication and a similar meal were repeated every three hours during daytime. Two enemata daily were given. Headache disappeared first, and marked diuresis set in, so that in the next twenty-four hours 110 ounces of urine passed. Edema began to subside after the second dose of urotropin, as did swelling in forty-eight hours, when the urine was free from albumin. Because of the HCl she got and retained appetite. Fever disappeared the second day. She began to distinguish objects after two days, and read without strain in a week; then the pulse also was normal. Four and one-half days after institution of urotropin she took a long journey for home. Within a week the 5-grain doses of urotropin were given three times instead of five times a day, and for another month twice a day. The formaldehyde in urotropin evidently produced a germicidal action in the infected kidneys.

CORRESPONDENCE.

New York Association for the Blind.

SPECIAL COMMITTEE ON THE PREVENTION OF BLINDNESS.

Editor Buffalo Medical Journal:

Sir—In the spring of 1908, the generosity of a lady in this city rendered possible the establishment of a Special Committee on the Prevention of Blindness, as a subcommittee of the New York Association for the Blind.

The object of this committee is to ascertain the direct cause of preventable blindness and to take such measures in coöperation with the medical profession as may lead to the elimination of such causes.

The prevention of ophthalmia neonatorum is the principal aim of the members of the committee, and they seek full coöperation with the medical profession, the state and city boards of health, the state and county societies, and all organisations or persons interested in the subject.

I am sending you our first two publications, in the hope that your journal in the interests of those infants who may become "unnecessarily blind," will give the matter that publicity which will aid in reducing the criminally large percentage of needlessly blind.

J. CLIFTON EDGAR.

New York, February 4, 1909.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

All communications, whether of a literary or business nature, books for review and exchanges, should be addressed to the editor, 238 DELAWARE AVENUE, BUFFALO, N. Y.

VOL. LXIV.

MARCH, 1909.

No. 8

Buffalo General Hospital.

THIS excellent institution for the care of the sick or injured recently celebrated its golden anniversary. It was opened for the reception of patients in November, 1858, in a building that constitutes a wing of the present structure. The hospital building proper has grown so that it now nearly or quite quadruples the original structure in size. Besides, it has many or several additional buildings that belong to the hospital—a mortuary, a nurse's home, a child's hospital, and other minor houses. Taken in its entirety it may be said with a truth that Buffalo General Hospital is one of the better institutions of its class in America. Its fiftieth annual report deserves careful examination.

The *News* (Buffalo), in its Sunday edition of February 14, 1909, made the hospital the subject of its leading editorial. We take pleasure in reprinting because it contains much that should appeal to every public spirited citizen in Buffalo and vicinity. And this brings us to say that the surrounding cities and towns, —Niagara Falls, Lockport, Jamestown, Dunkirk, Tonawanda,—are all interested, or should be in the prosperity of the hospital. We will now let the *News* speak.

HELP THE GENERAL HOSPITAL.

In another column is printed a resume of the fiftieth annual report of the Buffalo General Hospital, which tells of the vast amount of good done in the past year and shows the usual financial deficit which seems to be the inevitable reward of large general hospital service. The Buffalo General Hospital has grown to be one of the finest institutions of its kind in this country. It is supplied with the latest and most perfect equipment for the treatment of diseases, both surgical and medical; its medical and surgical staffs are headed by men whose reputations are not purely local, men whose opinions are accepted as authoritative in both this country and Europe; every branch of medicine and

surgery is supplied by able workers whose every need in the fields of their special activity in the way of apparatus and appliances is at their command.

The hospital proper has been stripped as much as possible of the usual institutional atmosphere, and the wards, private rooms, buildings and grounds have been beautified; there are arbors, balconies, pergolas and sun parlors and a roof garden all inclosed in glass. All this has been done not without great effort on the part of the trustees, and it has been done without expense to the funds which are devoted to the maintenance of the hospital and to the care of the patients. All the asthetic details of beautifying the buildings and grounds have either been donated by friends of the institution or by the trustees as individuals and as a board.

An institution such as the Buffalo General Hospital cannot be conducted as a purely commercial enterprise. So long as there is not sufficient money forthcoming for its maintenance there must be deficits year after year which can only be wiped out eventually by donations and legacies. Of the donations there are unfortunately too few. The endowment and the legacy are what count for results, permanent in character, in the maintenance of great charities, and the president of the General Hospital's board of trustees makes a suggestion which, if followed by the men and women of wealth, would place the General Hospital in a comparatively few years on a safe, self-supporting basis:

"Why should we not follow up our good intentions and attend now to our wills and so make the great Buffalo General Hospital the pride of charity-loving people."

That is far from a begging appeal for funds. It is a practical suggestion which should be taken to heart. No matter how small the legacy it will help in the splendid work which the hospital is doing and give it opportunity for more extensive work for the good of the people who are in the grip of disease. Each year that the city grows there is increased demand for hospital facilities, and even with the new wings and new buildings which have been added in recent years the hospital is often crowded. To meet the requirements of increasing population the support of the people is needed.

"Attend now to our wills" and the Buffalo General Hospital will become one of the greatest, as it is now one of the best conducted and most beautiful hospitals in the United States.

PRESIDENT Fallières's first list of decorations for the New Year (*The Tribune*), included the name of one man who is little known. This was a young physician named Louis Bozy, who lost an eye in the discharge of his duty. Dr. Bozy, while acting as assistant to an operating surgeon in one of the Paris

hospitals, had an eye injured through a drop of poisonous matter coming in contact with it. He knew that an antidote must be applied immediately, but by doing this he would have left the chief surgeon unattended, and remained at his post with his eye uncared for until the operation was completed. In consequence of his heroism he lost an eye and was confined to a hospital for a long time. President Fallières, in conferring the decoration, said that a wound received by a physician in the discharge of his duty was as honorable as one received on the battlefield.

THE pure milk crusade of the Chicago Health Department now is about to encroach on the hitherto exclusive preserves of the saloon, soda water stand and other public thirst-quenching establishments. Dr. W. A. Evans, Health Commissioner, believes that when the milk is sufficiently purified so that it doesn't contain the germs of everything from stomachache to typhoid fever, the public should have opportunity to drop in and drink it, at every convenient corner. "He has gathered statistics and reports quietly, and the latest, which he has had translated at considerable labor, described the public milk depots of Buenos Ayres, where more than a million glasses of milk are sold daily. In the Argentine Republic milk almost has become the national tipple. Such a situation, Dr. Evans believes, would not be bad for this country," says *The Chicago News*.

"If London were painted green," says a leading eye specialist, "it would have a wonderful effect upon the health and spirits of the Londoners." Hitherto all efforts to improve health and spirits by changing the color scheme of a city have taken the direction of painting the town red.

THE need for a hospital for contagious diseases has been shown again.—*Express*.

Yes, and if it takes our so-called city government relatively as long to build it as it has done to clear our streets of ice and snow after one sleet storm, we may await in patience the coming of the millennium.

PERSONAL.

DR. JOSEPH M. MATHEWS, of Louisville, has resigned the presidency of the Kentucky State Board of Health, a post he held

for seventeen years. Resolutions of regret were adopted by the Jefferson County Medical Society, coupled with a request that Dr. Mathews be requested to reconsider his action. Dr. and Mrs. Mathews are in Southern California for the winter.

DR. GEORGE G. WAGNER, 86 Greenfield Street, Buffalo, has been appointed district physician in District No. 8, vice Dr. John A. Hoffmeyer resigned. Dr. Wagner formerly resided at Angola.

DR. PATRICK J. HURLEY, of No. 2272 Seneca Street, Buffalo, was recently appointed a surgeon on the Mercy hospital staff. He has been until lately one of the internes in the surgical wards of Saint Johns' hospital, New York.

DR. EUGENE H. PORTER, of New York, has been reappointed State Commissioner of Health. Dr. Porter was first appointed by Governor Higgins, and made a good record in his first term of service.

DR. JACOB GOLDBERG, of Buffalo, was chosen unanimously to be Chairman of the Board of School Examiners at the meeting of the board held early in February. Dr. Goldberg has been a member of the board for some time past, and his selection as chairman is a gratifying recognition of his services.

DR. ALEXANDER SMITH, of Rochester, has been appointed assistant physician at the Soldiers' and Sailors' Home, Bath, N. Y., vice Dr. Carlton Foster resigned.

DR. EDWARD L. FROST, Buffalo, has been appointed specialist in children's diseases on the staff of the Riverside Hospital.

DR. WILLIAM R. DAVIDSON, of Evansville, Ind., has become associated in practice with Dr. Edwin Walker, and in the joint management of Dr. Walker's sanitarium in that city.

DR. E. A. BOWERMAN, of 234 E. Utica Street, Buffalo, has been appointed Police Surgeon, vice Dr. Joseph Fowler, deceased. This appointment reflects credit upon the Board of Police Commissioners, it being regarded on all hands as an exceptionally good one, Dr. Bowerman being well qualified for the post.

OBITUARY

DR. WILLIAM TILLINGHAST BULL, of New York, died at Wymberly, Isle of Hope, Ga., at noon February 22, 1909, aged 60 years. He had been ill for several months with a hopeless disease—cancer. He went south a few weeks ago to get the benefit of a milder climate, and thus stay in the open air for a considerable portion of each day. According to official announcement the end was due to edema of the lungs. For the last few days his condition gradually had grown weaker.

William Tillinghast Bull was born in Newport, R. I., in 1849. His first American ancestor was one of nine original settlers at Aquidneck, which later became Newport. He was educated at Harvard, the medical department of Columbia University, and in the hospitals of Europe. From the time he began to practise, in 1877, until illness incapacitated him, he was connected with various New York hospitals.

Dr. Bull became famous while in charge of the Chambers Street Hospital. He went to this institution in 1877 and remained there until 1888. His remarkable work in emergency cases gave this hospital a wide reputation. It was while here that, by an improved method of laparotomy, he helped to revolutionise the treatment of gunshot wounds in the abdomen. His method of treatment greatly reduced the mortality, which had been about 87 per cent. In 1889, after a competitive examination, he was appointed professor of surgery at the College of Physicians and Surgeons of Columbia University—a position he held until illness overcame him. At the time of his death and for some years previously, Dr. Bull easily took rank among the foremost surgeons of the world.

DR. CHARLES M. BRASTED, of Hornell, N. Y., who graduated at the University of Buffalo, 1881, died suddenly January 1, 1909, while making an emergency professional visit in his home city, aged 50 years.

DR. ALFRED J. BIGELOW, of New York, a graduate of the University of Buffalo, Medical Department, 1851, died at his home January 22, 1909, of senile debility, aged 73 years.

DR. JAMES MONROE GARVEY, of Tower, Mich., a graduate of the University of Buffalo, Medical Department, 1882, died in a sanitarium at Traverse City, Mich., February 1, 1909, aged 69 years.

SOCIETY MEETINGS.

THE Medical Society of the County of Erie, held its regular meeting Monday evening, February 15, 1909, at 8.15 o'clock, in the rooms of the Society of Natural Sciences, Buffalo Library Building. Program: L. Bradley Dorr, Silver Salts in Typhoid Fever; David Morrison, An Unusual Case in Obstetrics; John H. Grant, Whitlow or Felon; F. C. Busch, Practical Application of Research; Jacob S. Otto, Tendencies in Infant Feeding; Joseph Burke, Diagnosis of Pancreatic Affections.

THE Clinical Club held its regular meeting in the rooms of the Buffalo Society of Natural Sciences, Library building, Monday evening, February, 1, 1909, at 9 o'clock. The paper of the evening was entitled Antitoxins, Vaccins, and Bacterins with stereopticon slides, by Dr. Larned of Detroit.

THE Association of American Medical Colleges will hold its next annual meeting at the Academy of Medicine, 17 West 43d street, New York, March 15 and 16, 1909, under the presidency of Professor Eli H. Long, M. D., of the University of Buffalo. The Manhattan Hotel is the headquarters and Dr. Egbert Le Fevre, 52 West 56th street, New York, is chairman of the committee of arrangements.

THE Buffalo Medical Union held its 26th annual dinner at the Hotel Statler, Wednesday evening, February 3, 1906, with Dr. A. H. Briggs as toastmaster. At the table two seats were left vacant in memory of Dr. Grosvenor R. Trowbridge and Dr. Charles A. Ring who died since the last dinner. Dr. E. J. Meyer eulogised them in a brief but appropriate speech. Other toasts responded to were The Old Guard, by W. C. Phelps; Brotherly Love, by W. C. Krauss, and Before and After, by H. C. Buswell.

THE Roswell Park Medical Club, Buffalo, entertained the Physician's League, the woman's medical organisation, at a banquet given at The Markeen, Thursday evening, February 4, 1909.

THE Buffalo Academy of Medicine held meetings during the months of January and February, 1909, as follows:

Section on Surgery.—Tuesday evening, January 5. Program: Surgical Treatment of Chronic Arthritis, Edward H. Ochsner, Chicago, Ill. Discussion was opened by Dr. Bernard Bartow and Dr. Prescott Le Breton.

- Section on Medicine.*—Tuesday evening, January 12. Program: Symposium on tuberculosis. (1) An Outline of the Fight Against Tuberculosis in a city of the First-Class. Livingston Farrand, New York; (2) The Tuberculosis Problem in Buffalo, John H. Pryor; (3) Report of the Tuberculosis Day Camp, Geo. H. Eckel. There was also a demonstration, of the New Cutaneous Tests for Tuberculosis. Cases showing The Von Pirquet, The Moro and The Detre Reactions by Julius Ullman and Geo. H. Eckel.
- Section on Pathology.*—Saturday evening, January 23. Program: The General Principles of Percentage Feeding and the Laboratory Management of all Food Stuffs. Thomas Morgan Rotch, Professor of Pediatrics in the Harvard Medical School, Boston, Mass.
- Section on Obstetrics and Gynecology.*—Tuesday evening, January 26. Program: The Frequency, Etiology and Practical Significance of Funnel Shaped Pelves. J. Whitridge Williams, Baltimore, Md., Professor of Obstetrics, Johns Hopkins Medical School and author of Williams's Obstetrics.
- Section on Surgery.*—Tuesday evening, February 2. Program: The Diagnosis and Treatment of Vesical Tumors with Demonstration of an Operating Cystoscope, Hugh H. Young, Baltimore, Md., Professor of Genitourinary Surgery in the Johns Hopkins Medical School.
- Section of Medicine.*—Tuesday evening, February 9. Program: The Production of Clean Milk and its Behavior in the Digestive Tract, illustrated by stereopticon lantern slides, Frederick W. Howe, B. S., Boston, Mass., professor of physiological chemistry, food and dietetics at the State Normal School, Framingham, Mass. Discussion was opened by Irving M. Snow and Nelson G. Russell; Report of Three Cases of Pyloric Stenosis in Infants, Irving M. Snow.
- Section on Pathology.*—Tuesday evening, February 16. Program: The Type of Tubercle Bacilli which Produces the Different Kinds of Tuberculosis in New York, Wm. H. Park, Health Department, New York.
- Section on Obstetrics and Gynecology.*—Tuesday evening, February 23. Program: Salient Points of Normal Labor, Irving W. Potter; Salient Points of Abnormal Labor, Ludwig Schroeter; Practical use of Forceps, Kenneth McIlwraith, Professor of Obstetrics, University of Toronto; Some New Ideas Concerning the Care of the Eyes of the New Born, W. Linton Phillips.

THE Rochester Academy of Medicine held meetings during the months of January and February at the Hotel Seneca, as follows:

Section on Public Health.—Wednesday, January 20. Program: Report of Cases Treated by Vaccine, Charles O. Boswell.

Wednesday, February 24: Influenza and Common Colds, John O. Roe.

Section on Obstetrics, Gynecology, and Pediatrics.—Friday, January 29. Program: The Ante-operative and Post-operative Care of Patients, N. G. Orchard. Discussion was opened by E. W. Mulligan.

Wednesday, February 17. Subinvolution of the Uterus, J. F. W. Whitbeck. Discussion was opened by O. E. Jones.

Section on General Medicine.—Wednesday, February 3. Program: The First Interview with the Patient, William S. Ely. Focalised Epilepsy of Probable Arteriosclerotic Origin in a Boy of Thirteen, Edward L. Hanes.

Section on Surgery.—Wednesday, February 10. Program: Mechanical Lesions of the Sacro-iliac Joint, Ralph R. Fitch.

COLLEGE AND HOSPITAL NOTES

PROVIDENCE RETREAT, of Buffalo, has just published its thirty-seventh annual report, which is for the year 1908. The Sisters in charge of this hospital for the insane announce the opening of a new modern, commodious and absolutely fire-proof structure. The building is in the form of an oblong, with a central hall and east and west wings. The central hall is completely separated from the rest of the building and is fitted with separate rooms, twelve in number, appropriately furnished with private bath, affording absolute seclusion and quietude and adapted for the care and treatment of the most exacting and refined patients. The wings are devoted to the care and treatment of mental diseases generally. The building is heated and ventilated by the latest improved methods and lighted by electricity throughout.

THE Medical Department of Western Reserve University was one of the pioneers in demanding some college work for entrance. In 1898 it announced that, beginning in October, 1901, the completion of the junior year would be required for entrance. In

the eight classes which have entered since 1901, an average of 86 per cent. of the matriculates have either held a bachelor's degree on entering or have obtained it at the end of the first medical year.

In May, 1908, the Faculty unanimously voted to recommend a further advance in entrance requirements to the point of requiring a degree for unconditional entrance, but to admit conditionally a man who had completed the junior year in a standard college, (conditioned on the degree being granted by the college from which he had come before his entering the junior year in this medical department). In November, 1908, this vote was unanimously reaffirmed, and on December 17, 1908, the Board of Trustees of Western Reserve University voted that beginning with the academic year 1910-11 (i. e., in October, 1910), the further requirements for entrance to the Medical Department of Western Reserve University shall be in force.

DR. KENERSON'S cottage is at 115 Park street, Buffalo, N. Y. Medical, surgical and confinement cases, but no contagious diseases. Privacy and freedom of a home; conveniences, care and diet of a hospital. The patient's own physician and private nurse if desired. Rates, \$15.00 to \$30.00 per week. Inspection invited. Telephone (not in the book) Frontier 13083.

BOOKS AND AUTHORS.

The Surgery of the Ear. By **Samuel J. Kopetzky**, M. D., Attending Otologist, New York City Children's Hospitals and Schools. Octavo, pp. 385. Illustrated. New York: Rebman Co. (Cloth, \$4.00.)

A few years ago one would be startled almost to see a book with this title, a work limited to the surgery of the ear.—to one organ of special sense. And yet from the present outlook it is more than likely that, in the near future, we will observe men devoting their entire time to the treatment of the diseases of the ear. The advances of medical knowledge pertaining to the ear have been such, of late, as to justify the issuance of such a treatise as this, and Kopetzky is well qualified to undertake the task.

The radical mastoid operation, now attracting so much attention, receives elaborate treatment at this author's hands. He discusses all the various flaps and procedures, and illustrates the chapter admirably. He deals with the minor diseases and procedures as well as the major and thus makes a book equally valuable for the student, general practitioner, and specialist. It is a work of art, mechanically speaking, reflecting credit alike upon author, artist, and publisher.

Principles and Practice of Physical Diagnosis. By **John C. DaCosta, Jr.**, Assistant in Clinical Medicine in Jefferson Medical College, Philadelphia. Octavo, pp. 548. Illustrated. Philadelphia and London: W. B. Saunders Co. (Cloth, \$3.50.)

Following in the footsteps of his illustrious father, the younger DaCosta has created a work on physical diagnosis that might well challenge the admiration of the senior were he present to inspect it. One of the special features of this book is its size. It is sufficiently comprehensive for practical use, while it remains within the limits of convenience. The author has taught at the bedside for ten years and has accumulated a wealth of material from two large hospitals, that he has utilised in the preparation of his book. The illustrations are such as to make the text speak with forcefulness, accentuating every point of significance. Many of the pictures are from living models, either sick or well, according to the condition or fact being developed.

The text shows the handiwork of a scholar, the rhetoric is choice, and there is no repetition. Diphthongs are eliminated and compound words are few, making the page attractive to the trained eye.

DaCosta, it is almost needless to say, is strong in pulmonary and cardiovascular diagnosis; indeed, these regions are always the favorites in teaching physical diagnosis. On the other hand he does not neglect any region or locality that can be demonstrated in such a work. It may be stated, as a conclusion, that this is one of the very useful books of the period, and will surely be adopted by the larger schools of medicine as a textbook on physical diagnosis.

On the Means of the Prolongation of Life, by **Sir Hermann Weber, M.D., F.R., C.P.** Consulting Physician to the German Hospital, the National Hospital for consumption, Ventnor, the Mount Vernon Hospital for consumption and a member of the consulting committee of King Edward VII sanatorium at Midhurst, London. John Bale, Sons, and Danielsson, L't'd., Oxford House 83-91 Great Titchfield street, Oxford street, West. 1908. (Price, \$1.25 net.)

It is a genuine pleasure to read such a book as this,—to read this book,—so full of intellectual thought on a most important topic. If every person whose life is worth preserving should follow Sir Hermann Weber's advice regarding methods and habits of life, and especially with regard to eating and drinking, it would be safe to predict an increase in the average length of years of human life, and thus the diminution of mortality tables of the aged.

The importance of exercise is pretty generally understood by intelligent persons, but it is so effectively portrayed here as to make its results on the various organs more clearly understood. Exercise need not be violent, but it should be regular and of the kind adapted to the individual, sometimes more pro-

longed, again milder and of shorter duration. Respiratory exercises especially are to be commended, and when, for any reason they cannot be taken actively, as in walking or climbing, then they should be taken passively by slowly and rhythmically expanding and contracting the chest. Exercise of the muscles is of great benefit to a weak heart, and muscle tension should be practised by such persons. Sir Hermann lays great stress on these details. He writes so simply and yet fascinatingly that he entertains while he instructs. We recommend this book to the laity, as every intelligent person may read it with profit.

Surgery: Its Principles and Practice. In five volumes. By 66 eminent surgeons. Edited by **W. W. Keen**, M.D., LL.D., Hon. F.R.C.S., Eng. and Edin., Emeritus Professor of the Principles of Surgery and of Clinical Surgery, Jefferson Medical College, Phila. Volume IV. Octavo of 1194 pages, with 560 text-illustrations and 22 colored plates. Philadelphia and London: W. B. Saunders Company, 1908. (Per volume: cloth, \$7.00 net; half morocco, \$8.00 net.)

The fourth volume of Keen's *Surgery*, now under consideration, contains much interesting material as will be observed. Hernia, by William B. Coley; surgery of the rectum and anus, by Robert Abbe; examination of the urine in reference to surgical measures, by David L. Edsall; surgery of the kidney, the ureter, and the suprarenal gland, by Joseph Ranshoff; surgery of the bladder, by Brandsford Lewis; stone in the bladder, by Arthur Tracy Cabot; surgery of the prostate, by Hugh H. Young; surgery of the penis and urethra, by Orville Horwitz; surgery of the scrotum, testicle, spermatic cord, and seminal vesicles, by Arthur Dean Bevan; surgery of the intestines, but excluding the appendix, the rectum and the anus. Surgery of the omentum and mesentery, by Weller Van Hook and Allen D. Kanavel; surgery of the appendix vermiformis, by John B. Murphy; surgery of the ear, by Edward Bradford Dench; surgery of the eye, by George E. de Schwinitz; military surgery, by Surgeon General Robert M. O'Reilly; naval surgery, by Surgeon General P. M. Rixey; tropical surgery, by Walter D. McCaw; the influence of race, sex, and age on surgical affections, by William L. Rodman.

This group of subjects by these authors should be convincing proof of the great value of the book as a contribution to American surgery,—great surgeon, great book. Perhaps it were well if we said, great surgeons, great book, since so many of the contributors are, indeed, great surgeons.

This volume is one of the most valuable, if not the most valuable, of the series thus far issued. For example, it gives hernia in its latest operative phases, the prostate, the bladder, stone, the penis, the scrotum and testicle, the rectum and anus, all in most approved and latest surgery,—all being subjects that interest the general practitioner as well as the general surgeon. The mechanical execution and the art work of the book have never been excelled.

Intestinal Autointoxication, by **A. Combe**, M.D., professor of clinical pediatry at the University of Lausanne (Switzerland), together with an appendix on the lactic ferments with particular reference to their application to intestinal therapeutics, by **Albert Fournier**, formerly demonstrator at la Sorbonne, Paris. Only authorised English adaptation by **William Gaynor States**, M.D., clinical assistant in rectal and intestinal diseases at the New York Polyclinic. Eighteen figures, four colored. Rebman Company, New York. 1908. (Price, cloth \$4.00.)

This subject has but lately, that is, comparatively recently received the study it merits. Many symptoms, we had almost said many diseases of the digestive tract, heretofore obscure or not explained, are made clear by an understanding of the processes of autointoxication. It seems to us the better term to apply to the condition is digestive autointoxication, the latter to be written as one word. And this brings us to say that the compounding of words in general should be very much reduced in these days of linotypes.

This may be termed a "personal" book, the author having studied the subject of gastrointestinal autointoxication, and having created for himself "personal methods and special procedures." Combe lays great stress on regimen. He considers it so important, that he has organised in many hotels throughout Switzerland tables of regimen where, under the direction of special and responsible cooks, his dietetic prescriptions are scrupulously followed!

While the general practitioner with a trend toward the investigation of gastrointestinal diseases may derive great benefit from a careful study of this book, it is of particular interest to the specialist in diseases of the digestive tract. Combe allots over 200 pages to the consideration of treatment, from which many valuable hints may be gleaned, but permeating through the text everywhere regimen is the shibboleth. The author and the translator are enthusiasts and have presented views that may well receive the attention of the American medical profession.

American Practice of Surgery. A complete System of the Science and Art of Surgery by representative surgeons of the United States and Canada. Edited by **Joseph D. Bryant**, M.D., and **Albert H. Buck**, M.D., New York. Complete in eight volumes. Vol. V. Imperial octavo, pp. 1010. Profusely illustrated. New York: William Wood & Company. 1909. (Price, cloth, \$7.00.)

The fifth volume of this superb work is set apart to regional surgery. The contributors are, Edward Archibald, Montreal; Charles H. Frazier, Philadelphia; George C. Harlan, Philadelphia; Frank Hartly, New York; Charles H. Knight, New York; Robert Lewis, Jr., New York; Charles B. G. de Nancrede, Ann Arbor; James E. Newcombe, New York; Henry O. Reik, Baltimore; John D. Richards, New York; and James S. Stone, Boston.

The subjects are, surgical affections and wounds of the head; surgery of the cranial nerves; surgical diseases, certain abnor-

malities, and wounds of the face; hare lip and cleft palate; surgical diseases and wounds of the ear; sinus thrombosis of otitic origin, and suppurative diseases of the labyrinth; pyogenic diseases of the brain of otitic origin; surgical diseases and wounds of the pharynx; surgical diseases and wounds of the larynx and trachea; and laryngectomy.

From the foregoing it will appear that the volume is filled with material of particular interest to the specialist; though it must be understood that it is also full of interest to anybody who practises surgery in general. In other words we regard the volume as of great practical importance, one that is abreast of surgical science and art. It is a fitting companion to those which have gone before, and reflects credit upon the authors and editors, not to mention the publishers; for they should not be forgotten in an enterprise involving such a large outlay of money.

Obstetrics for Nurses. By **Joseph B. DeLee**, M.D., Professor of Obstetrics in the Northwestern University Medical School, Chicago. Third Revised Edition. 12mo, of 512 pages, fully illustrated. Philadelphia and London: W. B. Saunders Company. 1908. (Cloth, \$2.50 net.)

From the first this book became most popular and with each succeeding edition its popularity has kept on increasing. It is a book, though intended in particular for nurses, that medical students may study with benefit.

Few changes were required in this edition, the work having reached a degree of perfection that was most remarkable. Most of the engravings are original and of excellent quality. It is a book that should be found in the hands of every nurse, even though she may not cultivate obstetric nursing.

Treatment of the Diseases of Children. By **Charles Gilmore Kerley**, M.D., Professor of Diseases of Children in the New York Polyclinic Medical School and Hospital. Octavo, pp. 597. Illustrated. Philadelphia and London: 1907. W. B. Saunders Co. (Price, \$5.00.)

Again, we find the literature of diseases of children enriched by a contribution of no mean proportions, and this whether we consider the size of the volume before us, or the material which it contains. Kerley is a teacher of distinction and one who has mastered his subject. His work at the polyclinic has been of a nature to give him an enviable standing throughout the country, and it has served to familiarise him with the needs of the general practitioner regarding the diseases of infants and young children.

The treatise differs from the ordinary work on this subject because of the fact that it does not stop with the treatment of disease by drugs or with the stereotype directions for infant feeding. It takes up the defective nutrition and development of ad-

vancing childhood and instructs as to the management by muscular gymnastics and other important methods which tend to promote symmetry of growth.

The illustrations, especially those showing the treatment of scoliosis, are of the first order. The only criticism relating to the pictorial part of the book we would make, is that they are too few in number. Pictures play such a large part in medical instruction at the present time, it should be the aim of every author to make elaborate illustrations of his subject whenever and wherever engravings can be made use of with appropriateness. We commend this work to every general practitioner who assumes in any degree the treatment of the diseases of children.

International Clinics. A Quarterly of Illustrated Clinical Lectures and especially prepared articles on Treatment, Medicine, Surgery, Neurology, Pediatrics, Obstetrics, Gynecology, Orthopedics, Pathology, Dermatology, Ophthalmology, Otology, Rhinology, Laryngology, Hygiene and other topics of interest to students and practitioners. Edited by **W. T. Longcope**, M.D. Volume IV., eighteenth series. Philadelphia and London: J. B. Lippincott Co. 1908. (Cloth, \$2.00.)

This volume contains four articles on treatment; four on medicine; five on surgery; three on obstetrics and gynecology; one on hygiene; two on neurology; one on laryngology; and two on pathology.

Among the important articles are Lichty's on the treatment of gastric ulcer; Wainwright's on gout; Weber's on splenomegaly; Nicholls's on acute dilatation of the stomach; Vaughan's on fractures of the skull; McGregor's on traumatic lesions of the semilunar cartilages of the knee joint; Ely's on Bier's hyperemia; Cunston's on paronychia lateralis; Brown's on the rôle of insects in the transmission of disease; Scarlett's on the relation which hypertrophy of the various tonsils of Waldeyer's ring bears to the etiology of disease; Dunn's on the serum treatment of epidemic cerebrospinal meningitis; and Deaderick's on the etiology and treatment of pernicious malaria.

There are several other excellent articles of lesser importance which we cannot now mention by title. The illustrations while not profuse are mainly of good quality, giving emphasis to the text. This book as a whole is of excellent quality and will prove of usefulness to the general practitioner.

The Baby. Its Care and Development. For the Use of Mothers. By **Le Grand Kerr**, M.D., Author of *Diagnostics of the Diseases of Children*. 12mo, pp. 150. Illustrated. Brooklyn: Albert T. Huntington. 1908. (Cloth, \$1.00.)

The baby is the most important member of every young household; it always occasions much anxiety even when in good health. Kerr has told, in concise manner some important things

that every young mother should know. The book is small but the table of contents is large. The illustrations serve to draw attention to many salient features that otherwise might escape close attention. The author understands his subject, and is not verbose in dealing with it. We think it would be well for every young mother, as well as every prospective mother to obtain and keep "The Baby" at hand for reference.

Textbook of General Bacteriology. By **Edwin O. Jordan**, Ph.D. Professor of Bacteriology in the University of Chicago and in Rush Medical College. Fully illustrated. Philadelphia and London: W. B. Saunders Company, 1908. (Price, \$3.00 net.)

A knowledge of bacteriology becomes, of necessity, a part of the accomplishment of the medical student at the present time; at least he should acquire a working knowledge, so to speak, of the general subject of bacteriology. This author is a conscientious instructor and his book appeals to the searcher for this knowledge, increasingly so with every page one reads.

Jordan does not claim to present an exhaustive work embracing all sides of bacteriology; but rather to give the fundamental principles of the subject, together with the methods of laboratory work. The author lays great stress upon the importance of thorough training, and refers those who wish to pursue the subject further to larger treatises. It is one of the best practical works on bacteriology we have examined, the classification of bacteria, especially being excellent. The illustrations, too, deserve mention, as being of the better class, admirably fulfilling their purpose.

Therapeutics of the Circulation. Eight lectures delivered in the Spring of 1905, at the University of London. By **Lauder Brunton**, Consulting Physician to St. Bartholomew's Hospital. Small 8vo. pp. 280. Illustrated. Philadelphia: P. Blakiston's Son & Co. (\$1.50.)

Lauder Brunton is a name that commands respect wherever medicine is known and taught. He has condensed into these five lectures a vast amount of valuable information on a very important topic, embracing some of the more recent work in the physiological laboratory at the University of London. These lectures were delivered in accordance with the general purpose of the university establishing the laboratory—namely, to present the results of recent investigations by the investigators themselves.

This is one of the most interesting, not to say instructive, books we have read in a long time. It is a subject that every physician should become familiar with. Every now and then we hear of the death at a banquet of a prominent speaker which we know is due to defects of circulation; also, that a speaker was seized with "acute indigestion," which is usually due to defective circulation, perhaps arteriosclerosis. This book will serve to explain the causes of such attacks. The increase of

bloodpressure due to nerve strain, in a person with rigid or hardened arteries, is a fruitful source of sudden prostration and perhaps death.

Brunton points out the means of prolonging life even in the presence of grave circulatory defects. He should have a large audience, and his book is the medium through which he will obtain one.

Obstetrics and Gynecologic Nursing. By **Edward P. Davis, A.M. M.D.**, Professor of Obstetrics in the Jefferson Medical College, Philadelphia; Obstetrician and Gynecologist to the Philadelphia Hospital; Consultant to the Preston Retreat. Third edition, thoroughly revised. Philadelphia and London: W. B. Saunders Company. 1908. (Price, \$1.75 net.)

The author of this book is an experienced teacher of obstetrics and knows just the kind of instruction of which nurses stand most in need. If a nurse carefully heeds the instruction given by Davis she will be competent to manage a labor in an emergency without a physician. Indeed, every obstetric nurse should be prepared for such a contingency. The labor may be unusually rapid, or the doctor delayed in arriving,—these and several other circumstances may serve to thrust responsibility upon the nurse, and she must be equal to the occasion.

Davis has revised and enlarged this edition, making it one of the most complete works of its kind yet issued. It deals with gynecologic as well as obstetric nursing, and may be regarded as a textbook for nurses, just as the larger works on medicine and surgery are called textbooks, when compared with handbooks or manuals. No mistake can be made by the nurse who purchases this book.

Textbook of Diseases of Women. By **Charles B. Penrose, M.D., Ph.D.**, formerly Professor of Gynecology in the University of Pennsylvania; Surgeon to the Gynecean Hospital Philadelphia. With 225 illustrations. Sixth edition revised. Philadelphia and London: W. B. Saunders Company. 1908. (Price, cloth, \$3.75; half-morocco, \$5.25 net.)

This book, though primarily intended for the medical student is full of material of value to the general practitioner. It is written in plain language and is concise in its statements. In most instances but one plan of treatment is recommended, thus avoiding that confusion resultant from describing the methods of different authors or teachers. The illustrations, many being drawn from nature, elaborate the text with intelligence. The first edition was put forth in 1897, now comes the sixth eleven years afterward, showing the popularity of the work. This edition has been thoroughly revised, bringing it forward to the immediate present in the essentials required by modern gynecology.

Applied Surgical Anatomy, Regionally Presented. By **George Woolsey, A.B., M.D.,** Professor of Anatomy and Clinical Surgery in Cornell University Medical College, New York. Second edition. Octavo volume of 601 pages, with 200 illustrations in black and colors. Lea & Febiger, Philadelphia and New York, 1908. (Cloth, \$4.50, net.)

Anatomy and surgery go hand in hand, and have done so since Harvey's discovery of the circulation of the blood. Anatomy forms the base of the medical sciences and must be acquired in particular by him who would become a surgeon. It is well, too, for the prospective surgeon to teach anatomy for a decade, before turning his entire attention to surgery. Professor Woolsey has taught anatomy for eighteen years, and, besides, is a practical surgeon. He is fitted therefore, in a special degree, to present such a work as this.

This edition has been thoroughly revised resulting in much enlargement, as well as an increase in the number of illustrations. The use of colors adds much to the value of pictures relating to anatomy or surgery, and in this book discretion has been shown in this regard. It is a work well adapted to the general practitioner who must needs do surgery, as well as to the specialist in the field of surgery.

Vaccine Therapy and the Opsonic Method of Treatment. A short compendium for general practitioners, students and others. By **R. W. Allen, M.D., B.S.** (Lond.) late pathologist to the Royal Eye Hospital, etc. Second edition. Octavo, pp. 244. Philadelphia, Pa. Blakiston's Son & Company. 1908. (Price, \$2.00, net.)

So much is being said and written of opsonins, and of vaccine therapy, that such a manual as this is not only timely, but even a necessity. The progress even in a year's time has been remarkable and no one can predict what another year will unfold in this method of treatment. Of one thing, however, we are quite certain, in order to be successful it must be administered by skilful hands. This monograph, written by a man of experience, will do much to develop a proper understanding of the subject among general practitioners and students, as well as others who may be especially interested. The first edition of this book was sent forth in November, 1907, and in less than a year a new edition was needed. The author has corrected some defects and slight errors that appeared in the first book, while so much enlargement became necessary, that this may be considered almost a new monograph. At all events it will find its way undoubtedly into the hands of every person interested in this line of study.

Gonorrhea in Women. By **Palmer Findley, M.D.,** Professor of Gynecology in the College of Medicine of the University of Nebraska, Omaha. Pp. 112. St. Louis: C. V. Mosby Co. (Cloth, \$2.00.)

A monograph on this subject thirty years ago would have astonished the professional world; now, it is almost remarkable that it should not have been written sooner. Noeggerath, as early as 1878 published his wonderful declaration that 80 per cent. of married men have had gonorrhea; that 90 per cent. of

these have never been cured, and that of five married women, three have gonorrhea. His dictum was based on observations made in the city of New York. Scarcely had Noeggerath published his observations when (1879) Neisser announced his discovery of the gonococcus, which revolutionised the pathology and treatment of gonorrhea. Findley discusses with intelligence the relationship of latent gonorrhea to disease of the tubes, ovaries, and pelvic tissues in general, including the peritoneum. He gives an extensive bibliography mostly from the German. There are no illustrations, though the book is printed on heavily calendered paper. It is an admirable essay.

Practical Points in Anesthesia. By **Frederick-Emil Neef**, New York. Small 12 mo, pp. 51. New York: Surgery Publishing Co.

A primer of the size of this one is an excellent reference book for the anesthetist to carry in his pocket. Among the topics dealt with are induction of anesthesia, cardiac and respiratory collapse, when shall the patient be declared ready for operation, maintenance of the surgical plane of anesthesia, important reflexes, vomiting during anesthesia, obstructed breathing, use of the breathing tube, indications for stimulation, influence of morphine on narcosis, general course of anesthesia, awakening, recession of tongue after narcosis, postoperative distress, minor anesthesia with ethyl chloride, intubation anesthesia, etc., etc.

The Campaign against Tuberculosis in the United States, including directory of institutions dealing with tuberculosis in the United States and Canada. Compiled under the direction of the National Association for the Study and Prevention of Tuberculosis by **Philip P. Jacobs**, New York: Charities Publication Committee 1908. (Price, \$1.00 net.)

This remarkable book is published by the charities publication committee of the City of New York, the funds for which, however, were supplied by the Russell Sage Foundation. It is compiled under the direction of the National Association for the Study and Prevention of Tuberculosis by Philip P. Jacobs. The book is in reality a directory of the sanatoria, hospitals, and day camps for the treatment of tuberculosis in the United States and Canada. It gives, also, hospitals for the insane that make special provision for tuberculosis inmates, as well as penal institutions that make similar provisions. It also gives dispensaries and clinics for the special treatment of tuberculosis patients. Finally, it gives a summary of the legislation enacted in the several states and territories relating to tuberculosis. It is handsomely printed and bound and is sold at cost, the price being one dollar.

A Handbook of Suggestive Therapeutics, Applied Hypnotism, Psychic Science. By **Henry S. Munro**, M.D., Americus, Ga. 12 mo, pp. 360. Second edition. St. Louis: C. V. Mosby Co. (Cloth, \$3.00.)

The prefaces to this work not being dated, and as we did not see the first edition we accept the statement of the author, that the first edition was a large one and was exhausted nine

months after its appearance. This is abundant evidence that the book was acceptable to the profession, that is., that portion which employs this method of treatment. The volume is full of examples of the successful application of suggestion and hypnotism. It will prove interesting to any physician of experience who has the time to read it, but we doubt the propriety of placing such a work in the hands of the young and inexperienced practitioner. The pages are marred by the profuse employment of heavy faced type, and errors of grammar occur occasionally, but in general it represents its class.

Cataract Extraction. By **H. Herbert**, F.R.C.S., late Lieutenant Colonel I. M. S., Professor of Ophthalmic Medicine and Surgery in Grant Medical College, and in charge of the Sir Cowasjee Jehangir Ophthalmic Hospital, Bombay. Octavo, pp. 391. New York: William Wood & Company. 1908.

The extraction of cataract has been considered one of the more delicate surgical procedures, and ophthalmic surgeons, especially the juniors, will enjoy a book on the subject by so experienced an operator as Herbert. We do not mean to be understood that even the older ophthalmologists may not derive benefit from the reading or study of the book, at least in some of its parts. The author bases his monograph on an experience of 5,000 cataract operations, which he is modest enough to say is comparatively a small number for an ophthalmic surgeon in India, adding that in busy seasons, they rarely see their cases after operation, for lack of time.

Herbert describes the operation in minute detail, devoting a long chapter, 136 pages, to this purpose. In another long chapter, 100 pages, he presents variations to the ordinary procedure and their value. After complications receive liberal attention in generous space. The entire text is written in excellent English, simple, concise, instructive.

Arteriosclerosis. By **Louis M. Warfield**, M.D., Instructor in Medicine in Washington University, Medical Department. 12 mo, pp. 165. Illustrated. St. Louis: C. V. Mosby Co. (Cloth, \$2.00.)

It is fitting in these days of hurry and worry, of overwork and under rest, that such a book as this should be offered to the professional public. It is quite true that arteriosclerosis is a product of present day life, of high living and rush. Degenerative changes take place readily in the midst of twentieth century civilisation; and especially in the arteries with the increased blood-pressure incident to the excitement, the rapidity of movement, the strain of every day life, whether of business or pleasure. The cardiovascular system is sensitive and must be taken care of during early and middle life to permit of a comfortable old age.

Arteriosclerosis is a disease of prevention rather than cure. While it is usually a disease of advanced life yet sometimes children are affected with it. Outdoor exercise is the chief remedy—but the book must be read to be appreciated. It is an excellent monograph on a most important topic and every physician in

active practice, whether generalist or specialist, would do well to familiarise himself with its pages. We could wish the author had ended fewer of his sentences with "etc"—indeed, this abbreviation should never end a sentence,—yet, as a whole, the book contains few errors that mar its handsome pages.

BOOKS RECEIVED.

Clinical Diagnosis and Treatment of Disorders of the Bladder with Technic of Cystoscopy, by Follen Cabot, M.D., Professor of Genitourinary Diseases, Post-Graduate Medical School; Attending Genitourinary Surgeon, Post-Graduate and City Hospitals, New York. 8 vo, 225 pages. Forty-one illustrations, 1 colored plate. Prepaid \$2.00. New York: E. B. Treat & Co., Medical Publishers, 241-243 West 23d street, New York.

Bacterial Food Poisoning. A Concise Exposition of the Etiology, Bacteriology, Pathology, Symptomatology, Prophylaxis, and Treatment of So-Called Ptomaine Poisoning. By Professor Dr. A. Dieudonné, Munich. Authorized translation, edited, with additions, by Dr. Charles Frederick Bolduan, Bacteriologist, Research Laboratory, Department of Health, City of New York. 8vo, 125 pages. New York: E. B. Treat & Co., Medical Publishers, 241-243 West 23d Street. (Cloth, prepaid, \$1.00 net.)

The Changing Values of English Speech. By Ralcy Husted Bell. New York: Hinds, Noble & Eldridge, Publishers.

Blood Examination in Surgical Diagnosis. A Practical Study of Its Scope and Technic. By Ira S. Wile, M.D., New York. Duodecimo; 161 pages; 35 illustrations and 1 double-page colored plate. New York: Surgery Publishing Company, 1908. Cloth, price \$2.00; oil cloth for laboratory use, \$2.50; de luxe ooze leather, price \$3.00.

Seven Hundred Surgical Suggestions. Practical Brevities in Surgical Diagnosis and Treatment. By Walter M. Brickner, B.S., M.D., Assistant Adjunct Surgeon, Mount Sinai Hospital, New York; Editor-in-Chief, American Journal of Surgery, Eli Moschowitz, A.B., M.D., Assistant Physician, Mount Sinai Hospital Dispensary, New York, and Harold M. Hays, M.A., M.D. Third Series. Duodecimo; 153 pages. New York: Surgery Publishing Co., 92 William Street. Price, semi de luxe, \$1.00; full library de luxe ooze leather, gold edges, \$2.25.

Orthopedic Surgery for Practitioners. By Henry Ling Taylor, M.D. Professor of Orthopedic Surgery and Attending Orthopedic Surgeon, New York Post-Graduate Medical School and Hospital, etc.; assisted by Charles Ogilvy, M.D., Adjunct Professor of Orthopedic Surgery at the same institution; and by Fred H. Albee, M.D., Instructor of Orthopedic Surgery at the same institution. With 254 illustrations. New York and London: D. Appleton & Company. 1909. (Price, \$5.00, cloth.)

Transactions of the Fourteenth Annual Meeting of the American Laryngological, Rhinological, and Otological Society, held at Pittsburg, May 28, 29, and 30, 1908. Saint Louis: Published by the Society. 1908.

Hygiea, Medicine and Pharmacy. Monattsskrift Festband. Edited by Professor Dr. Carl Sundberg. Two volumes. Illustrated. Stockholm: Isaac Marcus, Bookseller and Publisher. 1908.

Transactions of the American Gynecological Society. Volume 33. Fourth year, 1908. Edited by J. Riddle Goffe, M.D., Secretary. Philadelphia: William J. Dornan, Printer.

LITERARY NOTES

SAUNDERS'S Books is the title of a new descriptive catalogue of medical and surgical works issued by the W. B. Saunders Company, medical publishers, Philadelphia and London. It is handsomely printed in tinted paper, fully illustrated, and is a beautiful specimen of the printing and engraving arts. It contains a description of almost every book a physician really reads and may be obtained on application to the publishers, 925 Walnut Street, Philadelphia.

THE *American Journal of Surgery*, New York, announces that Dr. James P. Warbasse, late editor N. Y. State Medical Journal, has joined its editorial staff. The March number will contain articles by Lilienthal, Young, Simpson, Hopkins, Tuttle, Brickner, Warbasse, Bandler, Meyer, Hartwell, deLatour, Sellings, and others.

ITEM.

BATTLE & Co., 2001 Locust Street, St. Louis, Mo., have issued No. 8 of their Dislocation Chart series. Physicians desiring any back numbers can get them upon request to the publishers.

WANTED: MEDICAL EDITING and PROOFREADING

MEDICAL EDITING AND PROOFREADING desired by a woman well qualified. Articles prepared from notes. All details looked after for busy physicians. Years of experience, with technical knowledge of medicine, English and several other languages. Have done work for eminent men and on the most successful text-books. Prices reasonable.

Address

BUFFALO MEDICAL JOURNAL
238 DELAWARE AVENUE, BUFFALO, N. Y.

BUFFALO MEDICAL JOURNAL.

VOL. LXIV.

APRIL, 1909.

No. 9

ORIGINAL COMMUNICATIONS.

From the Patient's Point of View

By GEORGE M. GOULD, M. D., Ithaca, N. Y.

THIS patient's history from the physician's standpoint was so instructive that I asked her to write it exactly as it appeared to her. When it was sent to me I found that my own records could add or change nothing, and as she is a woman of intellect and acumen, I have thought it best to let her account stand without change.

Ithaca, N. Y., February 7, 1909.
"Netherby," Cornell Heights.

My dear Dr. Gould: The accompanying is a full statement of the condition of my health from childhood to the time when I went to you last year at the age of 39 years.

I had been a child of good strong constitution, with a sound body, but of high strung nervous temperament, irregular in mood, full of wild spirits one day, depressed and melancholy without any cause, the next. My appetite was as capricious as my temper; sleep-walking and sleep-talking were of habitual nightly occurrence. The years between the ages of twelve and fifteen were spent in a boarding school. Continual headaches and severe pain in the face interrupted my classes, until finally all regular work was abandoned and it was an accepted fact that I should work one week and, alone in a dark room, rest completely the next. This meant giving up the use of my eyes, either for reading or writing, and even sewing.

Married at nineteen, the birth of my only child at twenty marked the breakdown of my physical strength, and during the next twenty years there was a gradual but constant deterioration of nerves and health, although no organic trouble ever developed and no disease was ever discovered to account for all the suffering. The nine months of pregnancy were marked by continual vomiting of unusual violence and the loss in weight of forty pounds. Nevertheless, I was able to nurse my child for eight months and she was fully and completely nourished.

The ten years following were made miserable by neuralgic pains in the face, under the right eye,—*"tic douloureux"* the doctors called it, and the habit of vomiting begun during preg-

nancy continued every morning. I was advised to have the suffering nerve cut, but as this was merely an experiment, I did not consent to have it done. The pain during those years became at times intolerable and the habit of taking small doses of morphine (1-16 of a grain hypodermatically) was commenced; during these years it was never permanently given up although the habit did not get beyond my control and the dread of it remained a wholesome restraint.

During my twenty-ninth year I edited a German book which involved three months of close work, mainly consisting of the reading of German type and the correction of proof-sheets. The result was an attack of pain so much more acute that it was followed by "nervous prostration" which kept me in bed for three months. The treatment of this illness consisted of 240 grains of bromide taken every two hours for twenty-four hours, with aconite and gelsemium on the alternating hours.

The result was that in six weeks I was taken to the Adirondacks reduced to "the lowest possible ebb of nerve-force," the effect aimed at by the bromide treatment. Memory and speech were impaired, feeling and sensibilities were dulled and the condition was one of continual "bromide drunkenness." Mine might have been taken for a case of erysipelas, because my face, head, hands and mouth were broken out with an eruption due to "bromide poisoning." But the neuralgic pain was gone! and in time I recovered, but to remain shattered nervously and so hardened to drugs that only enormous doses would ever have any future effect. From that date the hypodermic doses of morphine were increased to one grain and chloral for sleeplessness had to be taken in eighteen to twenty grain doses.

A trip to California and Europe was tried in order to take me from all social and household cares and work. The trip was unprofitable throughout because inability to take sufficient food to nourish me kept my vitality low, and my strength was being constantly sapped by headaches and vomiting.

In 1904 my daughter died and, soon after, a second attack of "nervous prostration" followed. This time there was no neuralgia in the face but a violent pain in the back of the head; this never completely left me until I put on glasses. The vomiting increased, and menstrual flowing continued uninterruptedly for eleven months. One month in bed again helped to reestablish some degree of health and I began a régime consisting of two raw eggs and one pint of predigested milk a day. Such an insufficient diet would not have been possible had I not by medical advice taken whiskey in ever-increasing quantity,—the theory being that by taking alcohol I was saving my system "the necessity of manufacturing animal heat."

Two years later came a third attack of "nervous prostration" with all of the same symptoms as before, *i. e.*, violent pain in the head, nausea, uninterrupted menstrual flowing, sleeplessness, and the like. This time the nervous exhaustion was more complete and a trained nurse was needed for three months, her sole duty

being to keep me from making any exertion, to feed me in minute quantities, and to give me morphine hypodermatically when the pain became intolerable.

The recovery was slower than on previous occasions and the nervous strain left was difficult to bear. An unexpected change in material circumstances made it necessary, January 1, 1908, for me to assume upon myself the whole burden of household work. Much to my surprise I was perfectly able to do it, and by giving up all reading, sewing, and literary work, and merely using my strength for manual labor, with no eye-work at all, I was not only able to do the work, but gradually improved both nervously and physically.

Imagine my disappointment when after three months of hopeful improvement I noticed that by slow degrees all of the old symptoms were returning, although no change had been made either in my work or in my manner of living. Sleeplessness returned, vomiting, the pain in the head and the continued menstrual flowing.

Then for the first time I had to notice that both my will-power and my mind were being affected. I could mark the mental deterioration by the difficulty I had in reading. The eyes could see, but the brain failed to be interested. Next it became wearisome for me to listen even to a short conversation, as my mind would wander from the speaker into blankness and a dazed, stupid vacancy. Memory for even ordinary daily duties failed me more and more often.

There must have been some kleptomania at this time, for on two occasions I found in my possession articles of small value, but which certainly had never belonged to me, and which I never could account for; I did remember deliberately taking one certain object which I *knew* was not mine, and which I did not in the least want or covet, but felt impelled to take because the temptation appeared strong and my will power had become numbed.

Lastly the memory of my own name and house left me suddenly while out in the street and I was unable to return home without assistance, because the locality of my house, the way back to it, all, had faded away leaving no trace in my memory.

The misery, terror, and hopeless horror of those weeks defy description. It had been easy to endure suffering, weakness, and the constant handicap of chronic ill-health. I had even been able to retain some hope against the hopelessness of a life-time of illness that had no name and could neither be cured nor helped. But to lose my mind and my will power was unendurable. My pride had been in my ability to endure physical suffering, and my firmness of purpose had served me valiantly for twenty years.

The tragedy of the future seemed to mean either insanity, or, in case I was driven again into the hands of the neurologist or specialist, into the morphine habit; for I well knew that even a small dose given to me in my enfeebled mental condition would inevitably be my absolute ruin. Then it was that I resolved to consult you, Dr. Gould, as a final hope, and if you had found

that you could not help me, I was firmly resolved to commit suicide.

Before going to your office some necessary letters were written, my affairs were all left in perfect order, and an overdose of morphine lay in my desk awaiting the result of my interview with you.

You never had a patient come to you more determined not to become a mental wreck, or a morphine victim; never one whose life hung by a slenderer thread.

Up to this time I had been in the hands of ten different doctors, not one of whom had ever suggested that I might be suffering from the results of eyestrain. At the ages of 30 and 35 I had consulted two of the leading oculists of the country, as my eyes seemed for a short time to be affected by the "bromide cure" I had been through. After examining my eyes and testing my vision both oculists assured me that my "eyes were perfect." "The optic nerve is weak because your general health is poor. Go home, take care of yourself, build yourself up and your eyes will improve correspondingly,"—this was in substance their advice.

Your diagnosis of my case was that I had suffered all my life from severe eyestrain, due to a small amount of astigmatism and considerable accommodational strain.

Your prescription reads:

R. + S. 0.37 + C. 0.25 ax. 165°
L. + S. 0.37 + C. 0.25 ax. 180°

The relief to the intense nervous strain was instantaneous. From the first hour of wearing the glasses the tension was lifted and has never returned. Within two days the mental condition began to improve. Reading became easy, thinking and working were possible as of old. My memory returned as sharp and clear as ever, and never for an hour has there been any return of the horrible depression; kleptomania vanished; and also of course, all suicidal purpose. No morphine, drugs, or stimulants have been desired or taken since this time.

The improvement of a physical nature is even more marked, and more easily noted. The vomiting ceased *absolutely*. For the first time in twenty years food could be taken in sufficient quantity to nourish the body and supply strength and vitality.

Before the end of the first week the menstrual flowing that had been going on for five months ceased, and the past three months have proved that all irregularity has been completely corrected.

As for the pain in the head there has been no return of it at any time. I even note that in such an unimportant a matter as a nervous trembling of the hands, which had made writing and sewing difficult for many years, has entirely disappeared.

A gain in weight of eleven pounds during the first six weeks is proof positive of the completeness of my recovery.

Pray do not hesitate to make what use you may see fit of this long account of my condition. I should be very glad to have the pleasure of being in any way of service to you. My name and address are entirely at your disposal and I make absolutely no restrictions as to the manner in which you may deem it best to publish this.

Faithfully, yours always,

KATHERINE M. HEWETT.

One is in duty bound to add that there are large numbers of oculists and general physicians who have in the same way failed to cure thousands of patients afflicted with similar sufferings due to the same cause. Multitudes of patients are being passed through oculists' offices with the same diagnoses of "eyes are perfect," "too little astigmatism to correct," "it is all due to your general health,"—or they are outfitted with glasses which add insult to the organism's already-existing injury. The great "leaders" whom this patient consulted are still giving the same advice to thousands. The fashionable neurologists are still treating their patients in the same way, and the professional responsibility for morphinomania, drunkenness, bromidism, "neurasthenia," "hysteria," and the rest, continues and increases. Certainly several thousand persons are annually committing suicide to be relieved of the terror of insanity, and of hopeless, mysterious, "causeless" disease, invalidism, and tragedy, when eyestrain, and eyestrain alone is the easily demonstrable cause.

It is almost incredible that this patient should have escaped the gastrologist, the surgeon or the gynecologist. This miracle was due to the sound judgment, even medical and scientific judgment, of the woman herself.

Diagnosis of Pancreatic Affections¹

By JOSEPH BURKE, D. Sc., M. D.

Visiting Surgeon, Emergency Hospital, Buffalo, N. Y.

THE right upper quadrant of the abdomen has at all times defied the efforts of the diagnostician to dogmatically differentiate the diseases of the organs contained within its limits, mostly because these organs in one way or another have anatomical and physiological relations in common. Thus the pylorus, the duodenum, the gall bladder and bile ducts and the pancreas, are topographically akin and in many cases in disease of any one of these organs, the symptoms as pain, icterus, local tenderness, and the like, that arise from it, cannot always be definitely interpreted as arising from that special organ alone, but can

1. Read at the meeting of the Medical Society of the County of Erie February 15, 1909.

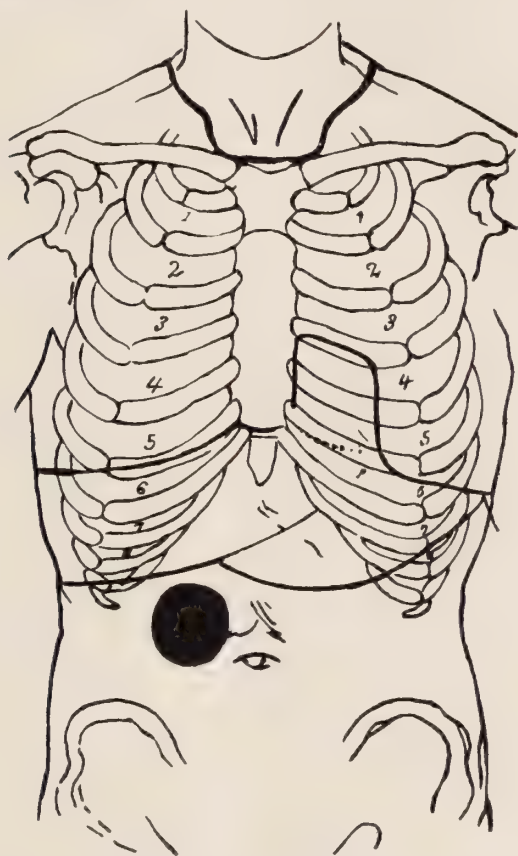
just as well be attributed to all, thus it is that the diagnosis of disease of the pancreas, the most concealed organ of all, is not on a firm clinical footing. The report, therefore, of any case of pancreas disease needs no apology for its addition to an already too scant literature.

Up to the time when von Mering and Minkowski published the results of their experiments upon animals, in which they partially and totally extirpated the pancreas, very little was known as to the symptoms of disease of this organ and hence little attention was given to the diagnosis; but when they established the fact that any functional derangement or impairment of the pancreas—namely, a diminution or absence of the pancreatic secretion, would give rise to glycosuria and rapid progressive emaciation, as well as a diminution or absence of indican in the urine, they undoubtedly laid the foundation of our present knowledge of the symptoms that result in an individual whose pancreas is the seat of disease. Add to these three, a fourth, icterus, and you have the classical quartet of symptoms that usually accompany affections of the pancreas. Lately there has come a urinary reaction—I believe it has come to stay—the so-called Cammidge test, especially the improved “C” reaction, a test though at present in an experimental stage, bids fair to become pathognomonic in the chronic inflammatory troubles. As a sixth symptom is to be mentioned the altered condition of the stools which, as a rule, are copious and contain starch granules undigested muscle fibers, and quantities of fat globules.

Concerning icterus in pancreas disease I am going to state that any one who can diagnosticate the cause of icterus in every given case, is certainly master of the differential diagnosis of diseases of the organs in the upper abdomen generally, but such a master has not yet appeared in our science or generation. However, I shall tax your patience with the following clinical “icteric” syndrome of Neusser, that is, in any case of icterus where the following symptoms are also present. (a) thirst, (b) large appetite, (c) copious stools which contain starch, undigested muscle fibers, and fat, (d) no bradycardia, (e) no indican in the urine, and (f) polyuria without sugar—other things being equal, our attention is directed to the extreme probability that a disease of the pancreas confronts us. This syndrome is remarkably shown in a case that recently came under my observation in which on the basis of it, with other findings, I was able to make a correct diagnosis of an affection of the pancreas, which case I shall report here tonight. There are two other symptoms—namely, sialorrhea and persistent vomiting, that are present in some cases; obstinate constipation is

said to characterise acute hemorrhagic pancreatitis. I do not know of any better way to discuss the local physical manifestations of pancreas affections than by the report of a personal case, which follows:

Mrs. Y., married, never pregnant; had pertussis and measles when 5 years of age; diphtheria at 14; rheumatism at 19; family history negative. For the past few years has complained at



BURKE: APPEARANCE OF PANCREATIC TUMOR.

various times of attacks of indigestion. September, 1908, suddenly in the night, suffered severe pain in epigastrium, fainting spells, and the like, which were ascribed to acute indigestion. Since then has been troubled more or less with stomach and pains in the right shoulder.

At present she complains of pain in epigastrium immediately after and sometimes just before eating. Does not vomit. Complains of severe pain in right shoulder, is unable on account of

pain to raise arm. Appetite good, hunger present nearly always, but on account of pain is afraid to eat. Complains of thirst, must arise several times during the night to drink and to urinate; bowels move freely, stools copious and light colored. In September, 1908, her weight was 158 lbs., is now 126½ (in less than five months a loss of 31½ lbs.).

Physical Examination.—Pulse, 78; respiration, 20; temperature, 98½° F. Patient is pale, sallow; skin lax, fat poor. Conjunctivæ slightly jaundiced, noticeably inner portions. Mucous membranes pale; bleed easily at teeth margins. Tongue slightly coated; neck and chest negative; heart tones dull. There is marked atrophy and apparent paralysis of right deltoid. Abdomen flat except for the right hypochondriac and epigastric regions, where a rounded swelling can be seen plainly, about the size of a large orange. The respiratory excursions have no effect upon the position of this swelling and this is confirmed by palpation, however during expiration the swelling appears more prominent than during inspiration. Over this swelling, as well as over the epigastric and left hypochondrial regions there is exquisite spontaneous pain after and sometimes just before eating; upon palpation this region is tender and very painful to even slight pressure. Over this swelling the percussion note is distinctly dull with slight tympany. Artificial dilatation of the stomach causes the swelling to disappear and the dulness over it gives way to gastric tympany. The recti are rigid, the right more so than the left. This swelling is not elastic, gives no resistance, there is no fluctuation, the only description I can give is that of a "doughy feel." You are sure there is something beneath the palpating fingers, yet you cannot circumscribe it. Tumor is fixed. Blood, hb. 65 per cent., otherwise normal. Urine, 2600 c.c.; no indican, otherwise normal; no albumin; no sugar. Stool, microscopically, starch, undigested muscle fibers, fatty cells, some plant cells, triple phosphate. Stomach, delayed digestion; free HCl.

Considering in this case:

1. Rapid emaciation, loss of 31½ lbs. in less than four months.
2. Pain in upper abdomen, so-called indigestion.
3. Icterus, with Neusser syndrome: thirst, polyuria, large appetite, starch, fat and undigested muscle fibers in copious stools, pulse, 78, and absence of indican in the urine.
4. Local manifestations, fixed swelling in right hypochondriac and epigastric regions, whose dulness upon percussion gave way to gastric tympany after artificial dilatation of the stomach, and disappearance of the swelling at the same time you have a classical clinical picture of an affection of the pancreas, which could be mistaken for nothing else, a positive diagnosis which was confirmed by the findings at operation. I found

after opening the gastro-hepatic omentum that the pancreas head was swollen about the size of an orange, grayish pink in color; the remainder of the organ was also swollen. The gallbladder was inflamed but normal in size and contained a very black, thick muco-purulent bile, so thick that it could not run through canula of aspirator. I found no stones in the common duct. Cholecystotomy completed the operation.

1092 MAIN STREET.

The Citizen Doctor¹

BY EDWARD MUNSON, M. D., Medina, N. Y.

UPON an occasion such as this, when physicians get together to exchange views and invite discussion upon subjects medical, one ought, perhaps, to preface with an apology, a paper which, ignoring science and technic, seeks but to deal briefly with certain broad conditions of interest and importance to us as medical men.

Modern life is so complex a thing, and the medical science of today so exigent, that we are sorely tempted in our pursuit of the latter to let the other completely escape us. Too often does the busy doctor, divorcing himself completely from civic affairs, emulate the cynic's part, and exclaim with Tennyson's pessimist, "I will bury myself in my books and the Devil may pipe to his own." We are citizens before we are doctors, and other things being equal, I hold him to be the best doctor who is at the same time the best citizen.

Our profession has ever been regarded as an honorable one, and justly so. It brings us into the very closest contact with our fellow men. Into our ears are breathed such secrets as only the confessional may know. Before our eyes are lifted masks which have hidden horrors no priest has ever guessed. We are bidden to share in the simple pleasures of the poor; to revel in the palaces of the rich. We lift the new born infant up to receive its mother's first greeting, and we sit by the bedside of the nearly-departed, while "pallid death upon the black horse" keeps like vigil with us just outside the door. Surely, than the physician no one can better echo the sentiment of the old Roman, "I am a man, and nothing which concerns mankind can be an alien subject to me."

Now, to begin with, it seems to me that medical men should take a keener interest in politics. Of course, I do not mean that they should become "politicians" in the vernacular sense of the term, but that they should keep well abreast of national, state and

¹Read at the meeting of the eighth district branch of the Medical Society of the State of New York held at Batavia September, 25, 1908.

local political matters; that they should attend primaries when possible and lend their influence to the best men and the best measures, and that, when occasion calls, they should rise above the partisan, and contribute their mite to uplift the plane of our common citizenship. Then, too, the citizen doctor should be ever mindful of the importance of the matter of education, as it is conducted in our public school system. There is much in this that will appeal to him in his dual capacity as citizen and physician. An official connection with school boards extending over a period of twenty years has opened my eyes to some serious defects in a system, which at the same time possesses many excellencies.

One may note with pleasure a general improvement in matters of ventilation, the heating and the lighting of schools. There has been advancement made in the direction of sanitary closets, in better constructed seats, in text books, libraries and apparatus for laboratory work. There has been a steady and remarkable increase in the qualifications required for teaching, and there has recently been a belated and somewhat dilettante examination for bodily defects in the pupils. But, when all of these things have been conceded, the fact remains that, as regards educational matters, there is still something rotten in the state of New York. One may well doubt whether, in the fundamentals, the youth of to-day are as well grounded as were those of thirty years ago. There are too many subjects crowded into a curriculum of eight years. The pupil, forsooth, must needs have a smattering of physiology, of music, of literature and of art. He has "brushed with extreme flounce the circle of the sciences," but the three R's have suffered in the process."

Already there are signs of a reaction against these methods. Col. Charles W. Larned, reporting the results of this year's examinations for entrance at the West Point Military Academy, where there were twenty failures out of thirty-seven applicants from New York State alone, remarks that "this is surely a state of affairs that should make the judicious grieve and our educators sit up and take notice." In the city of Rochester, only the other day, there was held a meeting of citizens which entered a vigorous protest against the cramming fad. More power to their elbows! to which I invite my medical confreres to contribute. Again the physician should be ever in the van of those who labor to forward sanitation and the prevention of disease in the state. He should by voice and vote hold up the hands of the health-boards in their efforts to minimise the spread of infection and contagion, and no one is so well qualified as he to combat the ignorance and superstition which obstruct such measures.

Finally, if he would fulfill his highest duties as citizen doctor, he should lift up his voice, in season and out of season, against the three mighty vices, which have always afflicted and which still afflict his fellowmen: to-wit, the social evil, race suicide and intemperance. Let us ceaselessly hammer into the minds of our youth that "the gods are just and of our pleasant vices make instruments to scourge us."

He who sees as does the physician, the insidious, but merciless, ravages of the gonococcus and the microbe of syphilis, the countless thousands of innocent women who invite pus tubes unaware, the bright young victims of paresis syphilitica, and the maniacal miseries of delirium tremens, needs no dogma of hell-fire to point his text. Better than the minister, more forcefully even than the priest, can the wise and trusted medical counselor point out with warning finger the pitfalls which beset the path of self-indulgent youth. Nor should he be disheartened because of a world around him teeming with misery and vice. For though often times he may find himself in agreement with Huxley, when he says, "I know no study which is so unutterably saddening as that of the evolution of humanity as it is set forth in the annals of history," yet he must needs agree also with Huxley's conclusion that "one should rejoice in the good man, forgive the bad man and pity and help all men to the best of one's ability."

On the subject of criminal abortion but little need be said to an audience such as this. The vast majority of medical men stand four square in this matter, while to the criminals within our ranks, who rate the value of a fetal life at the best price which they can exact from their guilty partners in crime, appeal is useless. Hasten the day when they will be more and more regarded by the profession as "mere Pariahs of the outer world," and relegated in ever increasing numbers to the prison cells, which the law and the state hold ready for them.

And, now, having attempted thus briefly and, I fear, somewhat crudely, to outline a few of the directions where the duties of the physician merge into those of the citizen, I desire, in conclusion, to speak of one quality which, fostered and developed as it may be, will prove of the highest value to us, both as citizens and as doctors. Aside from purely scientific and technical attainments, I know of no asset so valuable to the physician as a healthy optimism. On the other hand, my imagination fails to depict a figure more cheerless and depressing than that of the medical pessimist. He would outdo Pandora, and from the all-but-emptied box of blessings would let even Hope escape. Surely, the cheering smile and the hopeful word should occupy no mean space in the medical armamentarium.

Now, to some, the attainment of a true optimism may be no easy task. One's outlook upon life has its roots deep in one's philosophy of life. Whatsoever a man believes, that he is. To my thinking two prerequisites are needful: belief in a supreme being and faith in a continued existence. Our profession has been often charged with a leaning toward materialism. If ever true, I believe that charge will not hold good today. Impatient of dogma it may have been; intolerant of creeds which have waged a losing fight against the progress of all science. But if believing in a future life, one can add only so much of faith as glimmers through the shell of that great agnostic, Herbert Spencer, when he speaks of "an infinite and eternal energy from which all things proceed," or of the unorthodox Mathew Arnold, when he defines deity as "the power not ourselves, which makes for righteousness," then one may be considered to have made a good start towards looking on the bright side of life. And the true physician will be content, if, when his life's fight against disease and death is finished, he can be written down, in the beautiful words of Robert Browning, the poet optimist, as

"One who never turned his back but marched breast forward,
 Never doubted clouds would break,
 Never dreamed though right were worsted wrong would triumph,
 Held we fall to rise, are baffled to fight better, sleep to wake."

Endothelioma of Bone Following Injury¹

By G. W. COTTIS, M. D., Batavia, N. Y.

IT IS not my intention to discuss the oncologic position of endotheliomata or to go into the theories of their origin. It is sufficient in the way of definition to remind you that since all endothelium is of mesoblastic origin malignant tumors of this tissue are properly classed generically as sarcomata. At the same time their peculiarities of growth, as well as their sharply defined histogenesis, entitle them to be classed as a specifically distinct form of tumor. They have been considered to be intermediate between connective tissue tumors on the one hand and epithelial tumors on the other, and histologically we find that they present all transitions from diffuse sarcoma to adenocarcinoma, the diagnosis from the study of a given microscopic section being sometimes impossible.

Endothelioma of bone is a rare condition, if the number of recorded cases be accepted as a criterion. It is probable, however, that many cases are not differentiated from sarcoma or carcinoma. In 1905, Howard and Crile collected nineteen cases of

1. Read at the forty-first annual meeting of the Medical Association of Central New York, held at Buffalo, October 27, 1908.

endothelioma and perithelioma of bone, and added four cases of their own, making twenty-three in all. I have been able to find only one other case in the literature. This was reported by Dr. John A. Hartwell in *Annals of Surgery*, December, 1904, and overlooked by Howard and Crile. No cases have been reported since. The case on which the present paper is based is therefore the twenty-fifth to be recorded.

The ordinary textbooks of surgery do not mention this condition, and it is the desire to emphasise certain features which may aid in the diagnosis of a condition always serious and often obscure, that leads me to take up the time of this meeting with the report of a case.

The patient, male, aged 58, bookkeeper, was injured by stepping through an opening between a veranda and a flight of steps. He fell, striking his scrotum and right thigh against the edge of the flooring. The blow caused severe pain, with swelling and ecchymosis in the scrotum and hip. He was able to walk unassisted, and the next day went to work as usual. For three weeks he worked regularly, although each step caused lancinating pains in the hip and thigh. At the end of this time he consulted me.

Examination showed the remains of ecchymosis on the inner side of right thigh. There was spasm of the muscles of the thigh most marked in those of the adductor group, which were strongly contracted, holding the thigh in slight flexion. Pressure on, and to the inner side of Scarpa's triangle and also on the greater trochanter caused intense pain, as did passive motion of the hip joint. The patient walked with difficulty and pain, the latter becoming very severe when his toe happened to catch on the edge of a rug or other obstacle. Radiograms of the hip joint were made, and showed a faint line crossing the upper third of the head of the femur. A competent radiographer interpreted this as a fracture.

The patient was put to bed and the hip was immobilised in flexion by a plaster of Paris spica. This gave slight temporary relief from pain, but at the end of a week it was necessary to remove the spica. Extension with a 10 lb. weight was then tried, but this seemed to increase pain, and was discontinued. After being in bed two weeks—five weeks from the initial injury—the patient had complete anorexia, constipation, and an annoying glossitis. He was losing strength and flesh rapidly and was too weak to rise without assistance. Large purpuric spots appeared on the thighs and abdomen. There was at no time any rise in temperature.

Two months after the injury the inguinal and femoral lymph nodes became enlarged and tender. The most careful examination revealed nothing but extreme tenderness about the hip joint. There was no swelling, fluctuation or crepitus. Pains began to appear in other parts of the body, chiefly in the ribs,

both anteriorly and posteriorly, in the scapulæ and humeri. Emaciation was progressive. The skin was dry and harsh and slightly yellow. Glossitis became so severe as to almost prevent speech and it was difficult to feed the patient even on liquids.

About four months after the injury a blood examination was made. The findings, with the exception of the color index, at first suggested pernicious anemia. Hb., 50 per cent.; red cells, 2,600,000; leucocytis, 4,000.

The red cells showed large and small forms, poikilocytosis, polychromatophilia, and many nucleated cells, both normoblasts and megaloblasts. The differential leucocyte count showed: polynuclears, 27.6 per cent.; lymphocytes, 41.3 per cent.; large mononuclears, 6.6 per cent.; transitional (marrow cells) 6.3 per cent.; eosinophiles, 16.6 per cent.; mast cells, 1.3 per cent.; myelocytes, none. Of the nucleated red cells, 20 normoblasts were seen to 7 megaloblasts.

The differential count was confirmed for me by Dr. M. Warren, of the pathological laboratory of Cornell University. Dr. James Ewing, after looking over the slides and the history of the case expressed the opinion that it was not a primary pernicious anemia, but a blood condition due to bone marrow injury following trauma—possibly impacted fracture of the femur—or to multiple myeloma. The eosinophilia suggested intestinal parasites, but frequent examinations of the feces for ova were negative. A tentative diagnosis of multiple myeloma was made. Repeated urinary analyses, however, showed an entire absence of Bence-Jones proteid (albumosuria) which is always found with multiple myeloma. This left us with the diagnosis of malignant degeneration of the bone marrow, the exact nature of the change being undeterminable.

The ordinary treatment for pernicious anemia gave no results clinically, although the blood picture changed somewhat. Pain and tenderness in most of the bones of the trunk and limbs became so intense that the patient could be moved in bed only by lifting him on a sheet, held by the edges. He died of exhaustion, October 2, a little less than eight months from the date of his initial injury. During the entire course of the disease, pain had been constant and severe.

Autopsy revealed no gross lesions of the viscera, except extreme thinning of the stomach and intestines, and intense anemia. The inguinal lymph nodes, and those along the course of the external iliac artery, were enlarged, but not adherent.

The right hip joint was normal and showed no evidence of injury. The tissues about the neck of the femur were edematous, and at the level of the lesser trochanter was a small amount of disorganised tissue of gelatinous consistency. The shaft of the femur at this point was soft and of a greyish red color.

The softening extended vertically about half an inch and involved one half the circumference of the bone, and all of the central portion. The other half of the circumference consisted of a thin shell of bone and periosteum. There was no enlargement and no new growth of bone.

Microscopic examinations were made of the kidneys, liver, spleen, tongue, intestine, adrenal, sympathetic ganglia, mesenteric and inguinal lymph nodes, tissue about femur and femur. Except for extensive granular and fatty degenerations, none of these tissues showed anything of importance except the inguinal lymph nodes, diseased femur and tissue adjacent to the diseased bone.

The normal bone marrow was replaced by a dense growth of epitheloid cells, having large densely staining nuclei. These cells were arranged for the most part in irregular solid columns, surrounded by and separated from each other by well marked capillaries. In some portions of the field, dilated capillaries filled with tumor cells were seen. All that remained of the original marrow structure were the bony trabeculae traversing the tumor mass. No giant cells were seen.

The gelatinous tissue immediately adjacent to the diseased bone consisted of disorganised muscle fibers, in the midst of which were small masses of tumor tissue closely resembling adenocarcinoma. Some areas showed a structure similar to that in the sections of bone, but most of the nests were composed of distinct alveoli, some of which had a single layer of cells, others having three or four layers. There were all gradations from tubules to solid cords of cells. No limiting membrane was discernible, and the muscular tissue was irregularly invaded, tumor cells occurring singly and in small groups between fragmented muscle fibers.

The inguinal lymph nodes were filled with similar tissue having however only a slight tendency to form alveoli. Traversing this tissue were bands of large spindle cells, forming septa between lobules of the round cells.

My time will not permit me to discuss differential diagnosis. Tuberculosis, syphilis, osteomyelitis, benign tumors, periostitis, and sarcoma must all be excluded, with the exception of the last—sarcoma. Clinically, this neoplasm cannot be differentiated from endothelioma, the only point of difference being the age incidence. Primary sarcoma of bone occurs before the age of 40 in from 85 per cent. to 95 per cent. of cases, according to various authors, while endothelioma occurs in about 75 per cent. of cases after the age of 40.

In order that this condition may be recognised before it has advanced beyond the operable stage, I would emphasise certain

conclusions whose importance is demonstrated by the case just described and by those previously recorded. These conclusions apply also to the sarcomata.

1. Malignant changes in the bone marrow or in the periosteum may result immediately from trauma, either slight or severe.

2. Pain is present early if the neoplasm originates centrally, *i. e.*, in the marrow, or if it begins in the periosteum and early involves a nerve trunk. On the other hand, pain may be entirely lacking and the first symptoms may be spontaneous fracture.

3. There may or may not be any palpable tumor formation.

4. Malignant disease of the bone marrow is likely to cause a pronounced eosinophilia and may cause a pernicious type of anemia.

5. The long bones are the ones most often primarily affected. Metastases occur in a majority of cases, their seat being most often in other bones. The next most common sites are the lungs, liver and lymphatic glands, in the order named.

In conclusion, let me urge that in any case of injury to bone followed by an undue amount of pain, in all cases of unexplained delayed union of fractures, in all cases of palpable tumor of bone, in all cases of spontaneous fracture, a blood analysis should be made. Eosinophilia, with or without lymphocytosis, anemia or the presence of nucleated red cells, points to serious bone marrow trouble. The urine should be examined for Bence Jones proteid, the presence of which indicates myeloma, and hence contra-indicates operative procedure.

On the Treatment of Tachycardia

By Privy Councillor Professor A. GOLDSCHIEDER, M. D.

Director of the Virchow Hospital at Berlin

(*Folia Therapeutica*, October, 1908.)

TO obtain successful treatment of accelerated action of the heart it is necessary to clearly establish the cause of the attack. The physiological factors tending to the production of such a result must come under primary consideration during the formalities of a medical examination, otherwise a false idea of the condition of the heart may be arrived at.

These factors are severe physical exertion, nervous and mental excitement, and the taking of coffee or alcohol. With a healthy heart the increased frequency of the pulse after physical exertion soon quiets down, but where the heart is weak or where there has been unusually great or unaccustomed exertion, it may continue for a long time, during which it may chance to come under medical examination.

Palpitation induced by the mental excitement of a medical examination is of great importance. The causes of accelerated heart action may lie in the nervous mechanism of the heart as well as in the heart muscle itself. Regarding the latter, on the one hand its weakness, and on the other its increased irritability, may give rise to a heightened pulse-rate, so that, in cardiac muscular debility we commonly find during rest an increased pulse frequency which, by slight changes in position or continued movement, is still more increased.

Inflammatory conditions, such as endo-, myo- and pericarditis, likewise cause increased pulse frequency, and the influence of the nerves on the activity of the heart muscle is so intimate and far-reaching that in those cases of tachycardia which are provoked by either a condition of debility or of irritability of the heart muscle, the participation of the cardiac nerves manifestly cannot be excluded. It is expedient, however, on diagnostic and practical grounds, to differentiate between those cases which have their origin in the nervous system and such as are dependent on an affection of the heart itself. It is doubtful to which group such clinical forms as paroxysmal tachycardia should be referred, but we shall provisionally include in the nervous group those cases in which disease of the heart itself is not discernible, and which show during their course that this is probably the case. In a third group those cases will be included in which it is certain that the nervous mechanism, as well as the heart itself, is simultaneously affected. In cases of *tachycardia of nervous origin* those of a *functional* nature predominate, though they may be caused by organic changes in the nerves as well as by pathological changes in the brain, medulla, or vagus nerve. One calls to mind the quickened pulse of meningitis, of brain compression, acute bulbar paralysis and tabes dorsalis, also of compression of the vagus (by tuberculous glands) and vagal neuritis.

These *functional* nervous attacks occur in the following forms: psychogène emotionelle (hysterical), palpitation, neurasthenic, reflex, toxic, anemic, and finally as a pure cardiac neurosis, which is always combined with a vasomotor neurosis. An increased pulse frequency of nervous origin may be assumed to exist in the absence of symptoms of organic heart disease, more particularly when there are indications of neurasthenia, hysteria, or some alteration in the condition of the mind, or when some source of irritation is shown to exist, and the course of the tachycardia and the manner of its appearance demonstrate the nervous character of the disorder, as, for instance, the cessation of functional tachycardia during sleep as was observed by my assistant, Dr. Kroner.

Toxic tachycardia (and arrhythmia) and that occurring after infectious disease may belong to either the nervous or to the myogenic subdivision of the mixed myogenic forms.

I will discuss the separate forms of *myogenic or muscular* tachycardia later, but here would lay stress on the fact that the increased pulse frequency, which is undoubtedly caused by organic heart disease, may at any time be complicated by nervous and psychical influences. Increased heart action is not necessarily accompanied by the sensation of palpitation. In many cases the patients feel nothing at all, in others they complain of fluttering and a feeling of uneasiness in the cardiac region, and in a proportion of the cases the palpitation is felt simply as an inconvenient throbbing, or is accompanied by painful sensations or mental distress. This increased action may be combined with irregularity (arrhythmia).

Groups of cases occur in which quick or slow heart action takes place, and the physiological respiratory arrhythmia is abnormally increased, and it is mostly these to which functional nervous arrhythmia belongs. Intermission and extra-systolic action are rare and occur in isolated cases only. Not infrequently an unequal time interval occurs between the separate heart beats and in the arrhythmia incident to disease of the heart muscle the frequency of extra-systolic action is characteristic.

Certain states of the heart depending on myocarditis, atheroma of the aorta, syphilis, or even granular kidney are very often held to be of nervous origin, because the increased pulse-rate, the feeling of anxiety, pain and lack of objective heart symptoms lead to that supposition. A careful examination of the heart, however, including examination by the x-rays, would often guard against such an error. A positive finding of the condition of the heart would not, on the other hand, exclude the possibility of an accelerated heart being of a nervous character. All nervous, physical and reflex (*e. g.*, gastrointestinal and genital) agencies may be effective in either a sound or unsound condition of the heart muscle. Marked palpitation during active exercise is mostly a symptom of cardiac weakness. Many heart patients have quite an ordinary pulse so long as they remain quiet, but on slight locomotion or by merely assuming the erect attitude they get increased pulse beat and finally cardiac arrhythmia. But a not inconsiderable action of the heart may take place in nervous conditions also during exercise, mostly when such are combined with a certain sense of fatigue or some psychical excitement on the part of the patient. The treatment of nervous and that of myogenic tachycardia varies widely.

In the nervous forms real heart tonics, such as digitalis and strophanthus, are usually of little good; yet, unfortunately,

preparations of digitalis are frequently prescribed to slow the pulse in tachycardia, the only result being the acquisition of dyspepsia.

The following measures are recommended for adoption as accessory to the treatment of the real underlying cause of tachycardia:

(1) *Rest in the Recumbent Position*.—It should be here noted that some neurasthenics cannot endure protracted rest, since they suffer nervous attacks, and on this account must be allowed occasional exercise.

(2) *Application of Cold to the Heart*.—This may be carried out by means of an icebag, or bottle filled with cold water, or by the use of Gaertner's coil, the latter being particularly recommended as it adapts itself so well to the chest wall, exercises no inconvenient pressure and by it the cold may be uniformly applied. The application of cold to the cervical region (nape of the neck) may be tried.

(3) *Mental composure* is of great importance not only in nervous but in every form of palpitation, as a close relation exists between mental conditions and the action of the heart; and it is in these conditions that sedatives are useful.

(4) *Sedatives*.—Preparations of the bromides, such as sodium bromide or a mixture of sodium, potassium and ammonium bromide, or the well-known effervescing bromide salt, or bromide tablets. Among the newer bromide preparations which may be recommended are: bromalin 3 to 5 grams a day, in powders of 1 gram each; bromipin, in doses of one teaspoonful three or four times a day, or from 30 to 50 grams as a clyster. Veronal in doses of 0.1 gram two or three times daily, sometimes exerts a soothing influence on general excitement, especially on that of the heart. Bromural (monobromisovalerianylurea) has also been much recommended in doses of 5 to 10 grains as a sedative drug, combining the effects of the bromides and valerians with the urea basis, which induces a healthy, dreamless sleep, from which the patient awakes fresh and invigorated. Huchard recommends quinine hydrobromide. Valerian preparations sometimes give excellent results, of which hornvval is worthy of special mention, as well as valerian tea or the tincture. Hydrocyanic acid should also be tried, the simplest form of which is the aqua amygdalarum amararum or as cherry laurel water (30 to 40 drops a day). The local application of menthol in the form of a stick or as an ointment, and inhalations of menthol dissolved in hot water are likewise useful in many cases.

(5) Should the accelerated nervous pulse be weak as well, we may draw on the preparations of caffeine (caffeine, caffeinæ-

sodio-benzoicum, caffeinæ-sodio-salicylas) as well as tincture of strophanthus. The extractum cacti grandiflori fluidum may be tried, 10 to 20 or 30 drops three times a day.

In violent action of the heart, which frightens the patient and causes great alarm, small doses of morphia, codeine or dionin may be necessary. At times the application of a pressure bandage (or Abbé's heart support) acts beneficially.

(6) *Gentle massage of the cardiac region*, abdomen and back, and the employment of electricity in its various forms (galvanism, alternating current baths and the high frequency current) are within the sphere of treatment to be adopted in all cases of nervous tachycardia.

(7) Lukewarm baths, 26° R. to 27° R (92° F. to 94° F.), with or without the addition of aromatic vegetable extracts.

As already remarked, the primary disease (neurasthenia, anemia, the uric acid diathesis) must be treated.

Where stomach, intestinal or sexual reflexes are the cause of tachycardia, they should be treated therapeutically. Fermentative changes or excessive gastric acidity should be treated with alkalis, or the stomach should be washed out and the diet carefully watched. An article which has often proved of the greatest service to me in conditions such as these and in reflex cardiac disturbance is camphora trita in doses of 0.1 gram three or four times daily, and camphora brom. 0.1 to 0.2 gram several times a day.

The occurrence of tapeworms in the intestinal canal may produce reflex tachycardia, and the taking of rich and heavy suppers may cause nocturnal palpitation. Moreover, the connection of gastric and intestinal affection with disturbance of cardiac innervation is not always merely reflex, the toxic effects of intestinal fermentation with pushing up of the diaphragm and consecutive mechanical influence on the heart being of greater importance.

(8) The intimate relation between tachycardia and sexual conditions is recognised, and among those coming under chief consideration are the period of puberty, especially in the female sex, the climacteric, dysmenorrhea, masturbation and diseases of the organs of generation (prostatitis, gynecological affections).

In treatment, the ailment which is the primary cause of the condition should always receive the first consideration. Amongst cases of nervous tachycardia, those accompanied by arterial constriction take an important place, the latter being caused by various conditions, as in the spastic angioneurosis of anemia, chlorosis and neurasthenia; on the other hand, toxic forms, such as the uric acid diathesis and the climacteric cardiac neurosis, are often combined with vascular spasm (Huchard). Besides the

symptoms of a cardiac neurosis there are added pallor and coldness of the extremities, paresthesia, vertigo, polyuria, and tensely contracted arteries.

It is possible, though it has not been conclusively proved, that the acceleration of the pulse is the result of the contraction of the arteries, but it is more probable that the irritability of the heart and of the vessels has a common cause. At any rate, treatment directed to a lowering of the vasomotor tone is indicated, such as washing and sponging of the extremities, alternate hot and cold friction, dry rubbing and the exhibition of nitroglycerin, trinitrin and amyl nitrite. Similar treatment is also recommended for the real angina pectoris vasomotoria.

In paroxysmal tachycardia not all treatment is useless. It is said that pressure on the vagus in the neck may mitigate the attack. I have often tried it, and have obtained no measure of success, but I have seen a draught of cognac put an end to the attack, and in another case the artificial induction of retching movements brought the attack to a rapid termination. But in most cases the means usually adopted are without effect, and then the attack ceases suddenly without any apparent cause. Besides treating the stomach, the introduction of cocaine or, better still, novocaine (in 5 per cent. solution) with suprarenin into the nose should be tried. Huchard recommends sulphate of quinine and adrenalin in lowered arterial pressure, also the application of ethyl chloride to the neck and back, and hydrotherapy in the form of cold sponging of the whole surface of the body, and more particularly the vertebral column, followed by a hot pack to induce sweating. Deep inspirations, too, may be tried, which not infrequently give at least temporary relief. Mustard plasters to the epigastrium and back of the neck are well worthy of trial. In Basedow's disease digitalis is a very popular remedy.

I have never seen a case in which this has done good, on the contrary, the cardiac systole without being prolonged is increased in force, which adds still more to the patient's discomfort. It is only when muscular insufficiency and dilatation supervene on the ordinary symptoms of Grave's disease that anything can be expected of digitalis.

Among muscular anomalies we will consider in general those cases of tachycardia and arrhythmia which occur when there is evident pathological change in the heart, or which are combined with distinct signs of muscular insufficiency, or which, according to their kind (rapid extra-systole, or well-marked inequality of the pulse), permit us to recognise the myogenic type. As already noted, the first-named point is not decided, for nervous tachycardia and arrhythmia may occur in organic heart disease. Myogenic tachycardia (and arrhythmia) is in part a symptom of

debility. We find it in cardiac muscular weakness, in myocarditis, arteriosclerosis, valvular heart disease, especially in mitral insufficiency, in dilatation of the heart, endo- and pericarditis and in contracted kidney. Toxic influences are of some importance, as well as the anatomical changes in the heart muscle. In cases of muscular arrhythmia the counting of the pulse should not be relied upon, but the rate of the cardiac contractions should be estimated by a careful auscultation of the heart itself, as owing to its lack of force a greater or less number of beats are not felt at the pulse. These missing pulse beats may amount to a half of the beats of the heart. It is here that heart tonics find their true sphere of action, and foremost among these is digitalis. It is common knowledge that there has been great difficulty in obtaining a constant preparation of the active principle of this drug, which varies according to the season when, and the source from which, it has been obtained and the manner in which, and the length of time, it has been kept.

The following preparations are worthy of recommendation: Digitalisatum, Bürger; dialysatum fol. digitalis, Golaz; crystalline digitoxin, Merck; and digitoxinum solubile, Cloetta; or digalen, which may be obtained commercially as an aqueous solution to which glycerine has been added.

Generally speaking digalen causes less dyspepsia than the other preparations of digitalis, and has the further advantage that it may be injected subcutaneously, into the muscles or even into the venous blood-stream. Tincture of strophanthus is a popular remedy. The active principle (strophanthin) of this drug has been widely used lately alone, that is, uncombined with anything else. It may be given internally or intravenously, the subcutaneous injection giving great pain, which, however, soon passes off, especially if the injection be made into the buttock. Personally, I have seen no special advantage in the internal administration of strophanthin as compared with tinct. strophanthi. Administered as an intravenous or intramuscular injection strophanthin acts energetically, but not in any way better than digalen. It did appear in one case of mine to act better than digalen, but only temporarily, its effects diminishing later on, whilst digalen soon reestablished compensation. In those cases which relapse after digitalis is discontinued, and the muscular insufficiency with increased pulse-rate and arrhythmia reappear, the use of small doses of digitalis (folia digit., 0.15 to 0.25 gram *pro die*; digalen, 10 to 20 drops daily) for several months is of advantage, or the long-continued use of the same drug can do good in certain cases of muscular tachycardia and arrhythmia, where the taking of larger doses for shorter periods has had no effect. Salts of caffeine and theobromine can be

taken along with digitalis and strophanthus and may be considered as vasomotor remedies. I prefer diuretin and of this 2.0 grams per day in subdivided doses. This acts as regulator of blood-pressure, and perhaps acts favorably on the vasomotor mechanism of the heart musculature itself. The tachycardia and arrhythmia in arteriosclerotic myocarditis demand the continued use of the iodides (sodium iodide—iodipin). If there be justifiable ground for suspecting syphilitic myocarditis there need be no hesitation in prescribing the necessary mercurial course. In the palpitation of those suffering from arteriosclerosis, where the heart has to combat the greatly increased arterial resistance, and particularly if accompanied with dyspepsia, Huchard recommends a milk-vegetable diet along with digitalis in small doses, and erythrol tetranitrate (in tablets 0.06 gram *pro dosi*). Small doses of morphia or codeine act favorably under certain circumstances in these cases.

Romberg draws attention to the occurrence of tachycardia in sclerosis of the coronary arteries, the treatment of which would conform to that of general arteriosclerosis. The tachycardia of aortic insufficiency merits separate discussion. Many patients afflicted with this disease show a persistently increased pulse rate as a sign of the irritable weakness of the cardiac muscle. The danger underlying this condition is the degeneration of the muscle and the insufficient emptying of the ventricle, which may give occasion to formation of a thrombus. The long-continued use of small doses of digitalis is well adapted to such cases.

In contracted kidney the action of the heart may be very much accelerated, and then it is practically always accompanied with confused rhythm (galiprhythmus). Beside a strict kidney diet, the following are of advantage: diuretin or theophylline, digitalis, camphor, caffeine small doses of codeine or morphia, hot hand and foot baths and abstraction of blood.

The occurrence of pendulum rhythm, combined with tachycardia (embryocardia), is very important and always reveals a condition of serious cardiac muscular debility and demands the energetic use of digitalis caffeine (injection of caffein-natriobenzoicum, 2 grams; aq. dist., 8 grams—a Pravaz's syringe-ful every two hours) and oil of camphor.

A NOTE ON POISONING BY EGG.—D. J. M. Miller of Atlantic City, N. J., describes several cases in which the use of even small quantities of the white or yolk of an egg has caused symptoms similar to ptomain poisoning. It makes no difference apparently how fresh the eggs are. The author believes that germs of putrefaction do penetrate the egg shells, and the poisons produced act on the very sensitive stomach of the patient. It is really ptomain poisoning that occasions the apparent idiosyncrasy.—*Medical Record*, March 13, 1909.

SOCIETY PROCEEDINGS.

The Medical Society of the County of Erie.

[Carbon copy supplied February 19, 1909.]

By FRANKLIN C. GRAM, M. D., Secretary.

THE regular meeting of the Medical Society of the County of Erie was held Monday evening, February 15, 1909, in the rooms of the Society of Natural Sciences, Buffalo Library Building.

The president Dr. Charles A. Wall called the meeting to order at 8.30 o'clock, and requested the secretary to read the minutes of the annual meeting held December 21, 1908. On motion, the minutes were adopted without reading.

The secretary then read the minutes of the council meeting held February 6, 1909. On motion of Dr. Krauss, the minutes of the council meeting were approved and the recommendations contained therein adopted.

This included the recommendation that honorary membership be conferred upon Dr. Henry R. Hopkins, who is thereby made an honorary member of the society; also the resignations of Drs. W. H. Glenney and Dewitt G. Wilcox, Buffalo, Henry Y. Grant, Falls View, Ont., A. G. Gumaer, Los Angeles, Cal., and A. P. Squires. Resignations of these members were thereby accepted.

The secretary stated that in response to a request sent to State Secretary Townsend, at the direction of the council, for a copy of report on malpractice suits defended by the State Society during 1908, he had received a complete report made by the counsel for the State Society.

A summary of this report was then read. The entire report will be published in the journal of the State Society.

The president called upon Dr. Eli H. Long, secretary of the state delegation, to make a report of the last meeting of the State Society. Dr. Long presented a verbal report of the work done by the delegates from this county and the results accomplished.

Dr. Lytle offered the following amendment to the by-laws: "That Section 8 of Chapter II. be amended by substituting the words 'is dropped from the roll for non-payment of dues' in place of the words 'removes from the State of New York permanently.'"

Under the rules, this amendment was laid upon the table, a copy to be sent to each member, the same to be acted upon at the next meeting.

Dr. Allen A. Jones suggested the advisability of employing a stenographer to make a verbatim report of the discussions at these meetings to be published in the State Society's Journal. The matter was referred to the council with power.

Dr. William C. Krauss nominated Dr. Ernest Wende for honorary membership. This, under the rules, was referred to the council.

On the recommendation of the Membership Committee, the following persons, whose names were presented by chairman Thomas H. McKee, were elected to membership in this society: Edward H. Kramer, 64 North Ogden street, Buffalo; W. B. Burlingham, 260 W. Utica street, Buffalo; Aldona Janowski, 472 Amherst street, Buffalo; Geo. J. Haller, 1084 Main street, Buffalo; Irving Phillips Lyon, 531 Franklin street, Buffalo.

The business portion of the session now being completed, the scientific program of the evening was proceeded with. L. Bradley Dorr presented a paper on "Silver Salts in Typhoid Fever;" John H. Grant spoke on "Whitlow or Felon;" F. C. Busch made brief remarks on "Practical Application of Research;" Jacob S. Otto spoke on "Tendencies in Infant Feeding;" Joseph Burke presented the subject, "Diagnosis of Pancreatic Affections," (published elsewhere in this number). These papers were discussed, a number of the members participating.

At the conclusion of the program a collation was served. About seventy-five members and guests were present.

ABSTRACTS.

The New Hypnotic Medinal in Psychiatric Practice

DR. S. PRATO, (Insane Asylum of Ancona). (*Rivista Sper. di Fren.*, Vol. XXXIV, March 4, 1908), remarks that he administered medinal (sodium diethylbarbiturate) to about thirty insane subjects, most of them females, insomnia being more prevalent in that sex. Some received it continuously for about two months, without there being, after ten to twenty days, any material fluctuation in the period of sleep. Per os $7\frac{1}{2}$ to 10 grains, dissolved in water or wine with sugar, were given three hours after the evening meal and generally readily taken. To excited or restless patients it was given rectally or subcutaneously. The results were satisfactory; the effect of this new hypnotic, which should soon meet with adoption is not only hypnotic but also sedative.

In old females no deleterious action on the heart could be seen. In a case of maniacal excitement with serious compensatory disturbances, medinal caused no exacerbation, nor did it counteract the beneficial effect of the cardiac remedies employed. Blood pressure, pulse and respiration were not affected by medinal. Never was headache or stomachache complained of, never

was the least irritation noted after the numerous injections. Of course, the effect of the remedy is stronger or weaker in accordance with the condition of the patient.

Everyone knows the danger of the action of chloral on the heart, and the uncertainty of sulphonal, paraldehyd and trional. The advantages of veronal over these induced its wide acceptance. Medinal, because of its easier administration, reliability and harmlessness, should supplant veronal. It is always effective and of rapid and prolonged effect. The sleep attained with it closely resembles natural sleep, is quiet and non-disturbed. Awakening is not accompanied by headache, vertigo or malaise. The effect of medinal is not only hypnotic but also sedative. Continued use does not show cumulative by-effects. It retains its efficacy for a long time; accustomance to it is much slower than with other hypnotics. It can be given without hesitation to old and weakly individuals. Given per os it is well borne and easily absorbed in the intestine. The subcutaneous injection is effective and devoid of drawbacks.

Experiences with Medinal-Schering

DR. LUDWIG EBSTEIN (*Muenchener med. Wochenschrift*, January 19, 1909), says: In the July number of *Therapie d. Gegenwart*, Ernst Steinitz of Berlin, recommended the monosodium salt of diethyl-barbituric acid as a substitute for diethyl-barbituric acid, which, under the name of veronal, is probably the most current hypnotic of today. The drawbacks of veronal,—the frequently slow appearance of sleep and the not rare after-effects—are due to its relatively limited water solubility. The monosodium salt of the acid has the advantage of ready solubility; and, because of its more rapid absorption and speedier excretion, its effect is generally more prompt and certain than that of diethyl-barbituric acid in the same dose.

He details eighteen cases, in all of which medinal had a prompt and reliable effect without unpleasant by- or after-effects. All patients took it without trouble and tolerated it well. Not only as a hypnotic, but also for alleviation and abbreviation of stenocardic, asthmatic and the like conditions, medinal has done him good service. The observations in one case, with medinal as auxiliary in the treatment of morphine habit, may incite to further like trials.

The dominating characteristic of medinal above all other hypnotics, especially over diethyl-barbituric acid, is its diverse applicability. The water solubility of the remedy enables its employment per rectum in cases with sensitive stomach or vomiting, and in restlessness and excitability it may be given subcutane-

ously. Administered rectally it acts even more promptly than internally. The subcutaneous injection does not act so quickly as the rectal application, but is more intensive and protracted in effect.

Treatment of Scarlet Fever

PROFESSOR E. GRAWITZ, (*Therap. Monatsh.*, December, 1908,) says that in view of the important role which the kidneys play in combating infection, prognosis at once becomes unfavorable when a nephritis hinders elimination of toxic products. The course of scarlatina or diphtheria, as can not be too strongly urged, is most unfavorably influenced when, in local treatment of the larynx, some of the antiseptic is swallowed or absorbed, and thus notorious renal irritants get into the system. The integrity of this most important excretory organ must be preserved. And therefore prophylaxis with urotropin, which acts mildly as a disinfectant in the urinary passages, is very commendable, as his success in scarlatinal therapy shows. But also in septic infections of different origin this renal prophylaxis is entirely rational.

Small children with scarlatina get, on admission, 0.25 gm. (4 grs.) urotropin thrice daily; large ones and adults get 0.5 gm. (7½ grs.) thrice daily, for four successive days. After a four days' interval, it is resumed for another four days, again withdrawn for the same period, and a final four days' course given. Albuminuria on reception is no counterindication; rather does it often disappear under urotropin.

During over four years, in more than 500 cases, his success from this procedure is so brilliant and unequivocal that he gives it, to a large extent, the credit for his low mortality figures. In patients admitted with non-affected kidneys, he has seen but 5 to 6 per cent. of renal irritation and inflammation, and most of these were only transient. Not one patient was left with a chronic nephritis. What is especially convincing, not one case of uremia was observed. Formerly, in the midst of a smooth recovery, a hemorrhagic nephritis with chills and uremia would suddenly set in. This severe complication has not been seen at all in recent years. Even patients admitted only on the third day of the disease, with renal irritation, extremely rarely suffered the severe sequels of nephritis. Phlebotomy he has in recent years used only in such isolated cases as were turned over to him because of renal complications.

On Various Uses of Collargol

COLLARGOL IN SURGERY.

PROFESSOR ROSWELL PARK (*Principles and Practice of Modern Surgery*) says regarding the treatment of septicemia: "Of great

value also will be found the silver ointment of Credé (unguentum Credé). This permits of absorption of silver through the unbroken skin (as in the case of ung. hydrarg.) and the dissemination throughout the system of the antiseptic virtue of the silver itself. To ensure its greatest efficacy, this ointment should be thoroughly rubbed in, especially over parts which are not too tender. Many cases of septic infection promptly yield under the influence of the argentine preparations which Credé has lately introduced. Another measure of great utility in selected cases is the intravenous infusion of a solution of Credé's soluble silver, made with 1 gram of silver in 1000 c.c. of sterilised water at a temperature of 105° to 110°. In cases of profound toxemia a small amount of blood may be withdrawn (50 to 400 c.c.) No hesitation need be felt in introducing 500 or even 1000 c.c. of this solution. It is the ideal way of bringing a powerful non-toxic antiseptic into immediate contact with pathogenic microbes."

COLLARGOL TO CHILDREN.

PROFESSOR B. K. RACHFORD ("Administration of Drugs to Children by Inunction;" *American Journal of Medical Sciences*, January, 1909), says that "Colloidal silver within the past few years has been administered hypodermatically by the stomach and by inunction in the treatment of various forms of localised and general septicemia. The profession, as a whole, I think, has come to recognise that this is a most valuable adjunct in our treatment of septicemia, and I for one, after a large experience extending over quite a number of years, am firmly convinced of its efficacy. In the acute enlargement of the lymphatic tissues of the neck which may follow scarlatinal, diphtheritic and other forms of tonsilitis, I believe that this remedy, in the form of unguentum Credé, properly rubbed into the surrounding lymphatic tissues, is of very great value in preventing the spread of the disease and in controlling the localised sepsis. This drug can be given more efficaciously to infants and young children by inunction than in any other manner, and its value in combating general and localised sepsis is of much more value in infants and children than it is in adults, because inunctions in general are more efficacious in children than they are in adults."

COLLARGOL IN JOINT RHEUMATISM.

PROFESSOR PLEHN (Municipal Hospital Urban, at Berlin. *Deutsche med. Wochenschrift*, December 24, 1908), says that "Our most approved remedy in joint rheumatism is collargol, intravenously as recommended by Credé, and as systematically employed by Riebold in the Dresden Municipal Hospital. The attempts at explaining the curative processes are as hypotheti-

cal as with salicylic acid; development of the disease germs is said to be hindered, a leukocytosis stimulated, catalytic processes set up, and the like. But, be this as it may, the favorable effect is hardly to be doubted, and for some time past we have not hesitated to use collargol intravenously in joint rheumatism which is exceptionally resistant to salicylic acid, or when salicylic is not tolerated well enough to be given in full doses, or when the discontinuance of salicylic acid is followed by repeated relapses."

COLLARGOL IN CYSTITIS.

PROFESSOR JEANBRAU (*Montpelier Medical*, May 31, 1908), says he had his attention called to the use of collargol in cystitis by Stoos and Tavel at the Berne Infant Hospital. His result in all cases was the same as from silver nitrate. But the great advantage of collargol over silver nitrate consists in its painlessness. In acute cystitis, the nitrate is agonising; here collargol is as effective without causing pain. Collargol quickly inhibits the pain of cystitis.

TOPICS OF PUBLIC INTEREST.

The Chemistry of Smoking

By H. IRVING HANCOCK

Sunday Magazine, New York Tribune, February, 28 1909.

THE under dog was filling his pipe, at which the medical student looked on with a knowing smile. The under dog is a graduate in, or student of, chemistry, who is getting his first practical laboratory experience by serving as a chemist's helper. The medical student liked to lounge in the laboratory because he felt that the atmosphere was helpful.

"Why don't you cut that out?" inquired the medical student, nodding at the pipe.

"Why should I?" cross examined the under dog.

"Don't you know that you're filling your system with nicotine? Don't you know that nicotine is a very deadly poison?" warned the medical student. "Say, if you want to get an idea of the nicotine that's in your tobacco, light your pipe and blow some mouthfuls of the smoke through a clean white handkerchief. Then look at the big brown stains of nicotine you'll get from that smoke!"

"Do you call that brown stain nicotine?" asked the chemist, from the corner of the room.

"Yes, isn't it?" asked the medical student, growing slightly red in the face.

The trick of blowing tobacco smoke through a white handkerchief is so old that it has become classic. The truth is that as an experiment it's a fraud. The brown stain is not due to nicotine, but to the condensation of tar that has just been distilled from the woody fiber of tobacco. Nicotine itself is a nearly colorless alkaloid, and is present in smoking tobacco only in small quantities. The brownish "juice" that is found in the stems of pipes is not nicotine, but mainly a mixture of tar and water.

There are a good many fallacies current regarding tobacco and smoking. One of them relates to the quantity of nicotine that a smoker absorbs. It is so small as to be practically insignificant. In the tobacco plant at maturity there is considerable nicotine; but the leaves are put through a process of curing and sweating, and, being a very volatile substance, a large percentage of the nicotine is driven from the tobacco during the sweating.

When a pipe, a cigar, or a cigarette is lighted, the heat promptly volatilises the nicotine still remaining in the tobacco. For that reason nearly all the nicotine passes from the tobacco to the atmosphere. Some of the smoke is drawn into the smoker's mouth; but is usually promptly expelled, carrying with it nearly all traces of nicotine.

While nicotine is popularly known as the poison of tobacco, few people know anything of nicotine's chemical relatives, the pyridine bases, which also exist in tobacco. In burning, the tobacco sets them free as it does the nicotine. Up to the present, experiments in physiological laboratories have not demonstrated conclusively that appreciable quantities of either nicotine or the pyridine bases enter the system of the smoker.

This is not to be taken, however, as a statement that nicotine and its chemical cousins do no harm whatever to weed users. It is possible, probable, that almost infinitesimal quantities do enter the smoker's system, and these, by cumulative effect, may in time work harm.

POISONS THAT DO INJURE.

There are two other poisons always to be found in tobacco smoke, one inert in small quantities, the other more active. The burning of tobacco in air forms, by combination with oxygen, two gases with which every reader is familiar. One of these is carbon dioxid, or carbonic acid; the other is carbon monoxid, the gas that is seen to burn with a blue flame at the top of a coal fire. The volume of carbon dioxid given off in tobacco smoke is large; that of its more dangerous companion, carbon monoxid, is small.

How do any of these poisons enter the system of the smoker? First of all, they are capable of being absorbed to some extent

through the mucous lining of the mouth. But it is in the lungs of one who inhales that the great harm is done. This senseless practice of sucking the smoke down into the lungs keeps up a constant and dangerous irritation of the delicate, sensitive membranes of those valuable organs. The burning of paper is blamed for much of the harm that cigarettes sometimes do; but to the delicate membranes of the lungs the tar abundant in tobacco smoke is much more harmful. And the poisons present in tiny quantities in tobacco smoke pass through the linings of a lung direct to the blood.

To the inhaler smoking is therefore a practice that tends to quick physical degeneration. For the smoker who never allows the vapor to go lower than his mouth, the cigarette is probably no more harmful than the pipe or cigar. Every smoker, however, who has the "cigarette cough" is an inhaler, whether he admits it or not.

Apart from diseases of the lungs, caused by inhaling, many medical authorities charge that persistent smoking causes hardening of the arteries and angina pectoris. In discussing this charge, it may be remarked that most smokers appear to die from other causes. Just how smoking operates to cause deposits of lime along the walls of the arteries is not quite clear.

Among smokers, at least, there is a very common idea that tobacco smoke is a valuable disinfectant. It is wholly probable that, at the moment when one is smoking, the fumes will do more or less damage to bacteria just then entering the mouth. That the use of tobacco renders the system of the smoker at all immune at any time when he is not smoking is extremely improbable.

That germs cannot exist on tobacco is another common delusion. Yet one of the manufacturing methods of improving the flavor of an inferior tobacco consists in first destroying, with formaldehyde, the bacteria already growing in that tobacco. The next step consists of "sowing" on the sterilised tobacco other kinds of bacteria. This is done under certain conditions of temperature and humidity, and results in a tobacco now possessing a flavor much more agreeable to the user.

An Unclean and Dangerous Habit

(New York Tribune, January 10, 1909.)

ACROSS the river in New Jersey a wealthy business man has had himself sworn in as special officer to enforce the law against spitting in street-cars. He has found that anti-spitting ordinances do not enforce themselves, and that a large

number of men can look the sign in the front of the street car in the eye without flinching while violating an ordinance which has a good sized penalty attached to it in case of conviction.

A Brooklyn man who has occasion to use the elevated cars about midnight complains that the same carelessness is shown on this side of the Hudson River. The sign is there, warning all and sundry of the dire consequences to follow spitting, and while this unquestionably has its effect, the nuisance is by no means sufficiently abated. A few nights ago he walked through the cars in the hope of finding a seat where he might sit without violating his perhaps too esthetic sensibilities, but in vain. He was compelled to take the least obnoxious place. No car attendant has ever been known to take any interest in this matter, and among violators of the rule are frequently numbered the policemen who ought to be expected to assist in the enforcement of law.

An exhibit is now being conducted in this city with the definite purpose of disseminating information as to the methods of preventing the spread of tuberculosis. At that exhibit particular attention is paid to the danger from careless spitting. In the street cars we have signs put up by a local anti-tuberculosis society advising all who ride in cars not to communicate tuberculosis to others or permit them to be the agents of spreading the disease through this means. Yet men who would be insulted if assured that they were not gentlemen are guilty of this practice, which is not only unnecessary and disgusting but fraught with grave danger to the community. A few public spirited men like the one who has taken up the fight for health and cleanliness in New Jersey would add much to the satisfaction of the women and well bred men who ride in our cars.

The State Charities Aid Association of New York

This association has issued the following bulletin:

WHY SPIT ON THE FLOOR?

More arrests should be made.

NEW YORK, March 15, 1909. "\$500.00 fine or one year in prison, or both." This is part of the following sign appearing in the New York subway trains and surface cars, daily read by thousands of people. "By Order of the Board of Health. Spitting on the floor of this car is a misdemeanor \$500 fine, or imprisonment for one year, or both, may be the punishment therefor.—Sec. 194 Sanitary Code, Sec. 151 Penal." Whether it is due to the fear of the penalty, or the general enlightenment of the public on the subject, is uncertain, but the fact remains that

the spitting evil has largely diminished in New York in the past decade, although from time to time drastic measures are employed by the Department of Health to further impress this law on the mind of the careless public. Only a few days ago Commissioner Darlington called out a special squad of policemen and had them on duty at some of the subway stations in this city. One hundred and eighty-four arrests were made, 681 having been made since January 1, 1909. Of course, the effect on the individual arrested is the least of the benefit to be expected from this rational enforcement of the law. It should leave a lasting expression on those who witness the arrests and those who read of them.

There is too great an apathy in regard to certain laws and ordinances on the statute books of most cities in this state: they are simply dead letters. The investigations conducted by the State Charities Aid Association in connection with the campaign for the prevention of tuberculosis have revealed that nearly every city has a spitting ordinance, but in the majority of them it is not enforced and arrests have not been made. The attitude of the average American citizen when he reads a sign, "Don't Spit on the Floor. Penalty \$500.00" is that this injunction is an infringement on his inalienable right as an American citizen to spit when and where he pleases. Doubtless, if the sign should read so as to appeal to his reason it might have a different effect. In some cities the sign, "Why Spit on the Floor? It Spreads Disease," is used. And while each person spitting doubtless feels that the sign is not meant for him, he is suspicious of his neighbor who indulges in the filthy practice, and this impression reacts as a check on his own carelessness. Nevertheless, there is an inexcusable amount of spitting done in every city.

Now, that the danger of this evil is known, not only to those few who are interested professionally or otherwise, but to the public as well there is no excuse for the condition of the public buildings and streets in some of our cities. It is time that police departments coöperated with the health department in enforcing these ordinances.

Vanderbilt Tenements

Hygienic Homes for Consumptives \$1,000,000 to go into a new System that may revolutionize New York—is a business move—Has also its philanthropic side, but is intended to be self supporting.

[*New York Sun* special to the *Buffalo Express*, February 24, 1909.]

MRS. WILLIAM K. VANDERBILT has embarked upon a model tenement enterprise here in New York, quite different from any of

the other improved tenement-building schemes with which the city in recent years has been made familiar. Mr. Vanderbilt shares his wife's interest in the new project and work has already begun toward its realisation.

Briefly stated, the enterprise is the establishment in the form of tenement houses of a healthful home for city sufferers from tuberculosis. It represents an investment of \$1,000,000 and the contractors who have already begun the work of clearing the land for the new building do not know as yet the name of their employer. In fact, they have been a little dubious about their job, in view of its magnitude, and have made uneasy inquiries of the architect who engaged them as to the financial responsibility of their real patron, whose name until today the architect has not been at liberty to make known.

The enterprise, while in its initial form, having for an object the supplying of hygienic homes for tuberculosis victims, has a larger and more important aspect, for it comprehends the opening of the way for a new housing system. While there is distinctly an element of the philanthropic in its initiation, it also represents a business proposition which the prime movers believe will commend itself so widely to builders and the public authorities that in due season it may transform the tenement-building system of the town. The plan was announced with Mrs. Vanderbilt's authority today by Dr. Henry L. Shively of the Vanderbilt clinic of the Presbyterian Hospital, and Architect Henry Atterbury Smith, who have the work under it in charge.

Dr. Shively has bought for Mrs. Vanderbilt eighteen city lots, extending from 77th to 78th streets between avenues A and B, with a frontage of 225 feet. On this plot four buildings are to be erected, to be known as the Shively sanitary tenements, after Mr. Smith's designs. They are to be built on a new pattern, although the several ideas that go to make it up have long been known. The novelty consists in the practical combination of them all in a form suited to give to sufferers from tuberculosis in their own homes the advantages of a sanatorium and to offer to healthy poor people the most healthful of living conditions in a big city. The buildings are to be made up of two, three, four and five-room apartments, offered at low rentals, and the four buildings are to house from 350 to 375 families. They are six stories high.

In presenting the plan, Dr. Shively remarked that Mrs. Vanderbilt had been not only interested in, but actively engaged in the work of the Vanderbilt clinic in tuberculosis cases for three or four years past, in the work of nursing the patients in their homes, supplying extra diet—for instance, milk and eggs—and in the removal of sufferers to sanitary quarters.

The fresh-air ward on the roof of the Presbyterian Hospital was given by her, and Dr. Shively said that it had been of incalculable use.

CORRESPONDENCE

The Wistar Institute of Anatomy and Biology

HUMAN EMBRYOS WANTED.

Philadelphia, Pa., March 2, 1909.

Editor Buffalo Medical Journal:

Sir—The Wistar Institute of Anatomy and Biology is making a strenuous effort to secure human embryological material. Last year we sent out a number of copies of the inclosed circular,¹ with the result that we obtained a number of perfect specimens of the younger stages so much desired for research work.

It is unnecessary to call your attention to the value of researches in a fundamental science like embryology, but I should like to call your attention to the fact that it is almost impossible for a research institution to obtain this material without the co-operation of men like yourself and I beg you, therefore, to give us such assistance in this matter as you may find possible.

We are prepared to send for specimens at any moment or to send neatly packed jars, with the necessary preserving fluid, to your office, hospital or to any place you may desire them.

We would like to secure specimens of all ages. The larger forms, from three months to term, may be sent by wrapping in a quantity of gauze and paper or by packing, without fluid in a box if sent promptly so that they reach the laboratory within six hours, otherwise they should be placed in 10 per cent. formaldehyde. The smaller specimens should always be preserved in 10 per cent. formaldehyde.

Should you be inclined to assist us, will you not fill out the enclosed postal card and allow us to do what we can to save your time? Address all express or mail matter to The Wistar Institute of Anatomy, 36th street and Woodland avenue, Philadelphia, Pa.

The Wistar Institute, as you probably know, is an institution established for the promotion of researches in anatomy and allied subjects. Its museum is open freely to the public and its research laboratories are open without cost to any competent investigator.

M. J. GREENMAN, Director.

1. See next page.

TO PHYSICIANS AND SURGEONS.

The Wistar Institute of Anatomy and Biology appeals to you for coöperation in securing human embryos for scientific investigations.

No one, more than you, will appreciate the value of researches in anatomy and other fundamental sciences, for the advancement of your art. The Wistar Institute, therefore, begs you to assist in placing this material in the hands of embryologists who will make good use of it.

The collections of embryos and other specimens belonging to the Wistar Institute are always open to any competent investigator for inspection and study. Its museum serves as a depository for anatomical materials which may have served the purpose of one investigation and are to be stored for future study.

A moment's thought will convince you that in one month's time in a great city, more human embryological material than exists in any collection in the world, goes to waste. Will you help us to serve this material that American anatomists may study it?

HOW TO PRESERVE HUMAN EMBRYOS.

Place embryos, including membranes, immediately in a mixture of one part formalin and nine parts water. Never place an embryo in pure water; it damages it for histological purposes.

The Wistar Institute will send to your office, on request, a neatly boxed jar, with a quantity of formalin and full directions for preserving embryos. Operations for tubal or extra-uterine pregnancies are likely to yield the most perfect specimens.

Full credit will be given the collector in every case, and specimens will be reported upon promptly. The institute will gladly meet any expenses incurred.

If you have a specimen for the Institute, telephone Preston 2575 (Bell 'phone), and a messenger will call for it, or you may send it by express to

THE WISTAR INSTITUTE OF ANATOMY AND BIOLOGY,
36th Street and Woodland Avenue,
Philadelphia, Pa.

IS FOOD CONTAINING BENZOATES INJURIOUS TO HEALTH? E. E. Smith of New York analyzes Dr. H. W. Wiley's report of his "poison squad" experiments to determine the effect upon health of benzoic acid and the benzoates, published in Bulletin No. 84 of the Bureau of Chemistry of the Department of Agriculture. He shows that the loss of weight which some of the men experimented upon underwent could be easily, and perhaps more logically, explained by other conditions than the finding of benzoic acid.—*Medical Record*, January 2, 1909.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

All communications, whether of a literary or business nature, books for review and exchanges, should be addressed to the editor, 238 DELAWARE AVENUE, BUFFALO, N. Y.

VOL. LXIV.

APRIL, 1909.

No. 9

The Military Surgeon

WITH the current issue of *The Military Surgeon*, Major James Evelyn Pilcher, its founder, and secretary of the Association of Military Surgeons of the United States, retires from editorial management and leaves to his successor, Major Charles Lynch, of the medical department of the army, a journal of military medicine which has not its equal in the world. Major Pilcher for years endeavored to secure the coöperation of the army authorities in the establishment of a journal devoted to military medicine, but met with little or no encouragement. There was that constant beaurocratic offishness, whenever the subject was mentioned, which was quite as lethal in its effect as would have been official condemnation. However, with the organisation of the Association, the doors were opened and the journal was established by Dr. Pilcher in 1901 and conducted by him up to the present time, in connection with his work as secretary of the Association.

Step by step he upbuilded the journal; its influence was widened; its pages were contributed to by the foremost authorities on military medicine in the world; no country boasting of an army and an army medical department was unrepresented in its volumes. All this time, Dr. Pilcher who had been retired from the medical department of the army because of disability incurred in the service, was working against the distressing odds of ill-health. And there is no doubt that his period of activity has been shortened by the devoted work he gave to the conduct of the journal which he has brought to its present position of eminence and power.

An idea of the terrible difficulties under which Major Pilcher has been laboring may be gathered when it is known that for two years he has not been able to read a line of manuscript submitted for publication nor a word of the printed journal because of chronic retinitis, a complication of the disability for

which he was retired. This exhibition of enforced dependence, unbearable to a man of Dr. Pilcher's activities, together with an enormous increase in the secretarial work made it imperative that he take that comfort which only absolute rest would give him. His request for relief was made to the executive council of the Association and his resignation was accepted with the adoption of these resolutions prepared by the three senior ex-presidents of the Association of Military Surgeons:

WHEREAS, owing to increasing physical infirmity, due to long and faithful service, Major James Evelyn Pilcher has found it necessary to tender his resignation as secretary of the Association and editor of the journal; and

WHEREAS, in the discharge of his duties, this officer has earned a high reputation for editorial ability and scholarship, also establishing for the Journal an authoritative position in medico-military literature; and

WHEREAS, he has, by his untiring industry in behalf of the Association, greatly extended its usefulness and welfare, be it therefore,

Resolved, by the Executive Council, That in the resignation of Major Pilcher the Association loses the services of a valuable officer.

Resolved, That wishing to give formal expression to our esteem and the regret we experience, not only at his resignation, but the condition rendering it necessary, this action be communicated to Major Pilcher, and that it be published in the journal of the association.

GEO. M. STERNBERG, U.S.A.

WALTER WYMAN, U.S.P.H.& M.H.S.

JOHN C. WISE, U.S.N.

This formal expression of regret, sincere as it is, coming as it does in the shape of resolutions, but faintly speaks the deep sense of loss which the Association will experience in the retirement of Major Pilcher. He has devoted to the work of editing the journal years of his life, none of which was free from illness and suffering; and that he succeeded in doing the great work which he has accomplished under such adverse circumstances speaks loud for his self-sacrificing devotion and his courage. There are few men who could, or would, have withstood the strain. There are still fewer who could, as Major Pilcher has on several occasions, stand before a gathering of strangers at the public sessions when the foreign delegates were decorated with the insignia of the Association, and in spite of serious illness, in the presence of pain, make presentation speeches which scintillated with wit, shone with historic reference and sparkled with rhetoric brilliancy.

Such a man is Pilcher and in his retirement he takes with him the heartiest wishes of his friends and associates for a speedy improvement in health.

The new editor of *The Military Surgeon*, Major Charles Lynch of the army, is well known in Buffalo, having served as surgeon at Fort Porter a few years ago. There could have been no better selection for secretary of the Association and editor of *The Military Surgeon* than Major Lynch. A man of high literary attainments and wide experience in military medicine, he will bring to the conduct of the journal all the elements which are necessary for the continued up-building of the finest medico-military journal in the world.

Major Lynch was the Army Medical Department representative with the Japanese army during the Russo-Japanese war; he won the Enno Sander medal for 1907, and recently has been active in the organisation of the medical reserve corps of the medical department of the Army.

We take leave of Pilcher with sincere regret; we welcome Lynch with warm friendship and affectionate regard.

The lines of *The Military Surgeon* have fallen in strong hands. N. W. W.

Honoring Drs. McCosh and Bull.

UNDER this heading *The New York Tribune* editorially in its edition of March 21, 1909, considers the appropriateness of the proposed memorials to these two distinguished deceased surgeons. Already something more than \$100,000 has been subscribed in the case of Dr. McCosh and it is probably that the Presbyterian Hospital will be removed to the site selected by Dr. McCosh.

No doubt, quite as large a sum will be subscribed in case of Dr. Bull. We let the *Tribune* speak for itself.

HONORING DRs. M'COSH AND BULL.

So distinguished were the services rendered to the community by two surgeons whose deaths have occurred within the last few months that there is peculiar propriety in the movements to recognise their work with permanent memorials. Dr. McCosh having been closely identified with the Presbyterian Hospital, that institution will naturally be the site of whatever token of appreciation is erected in his honor. Dr. Bull's intimate association with the College of Physicians and Surgeons (the medical department of Columbia University) lends equal fitness to the proposition to establish some monument to his memory in the well known 59th street school.

One of the suggestions concerning the form which the memorial to Dr. Bull should take is that provision be made for

a laboratory for surgical research. The plan is warmly approved by *The New York Medical Journal*, which prefers an endowment to a statue, because, in the opinion of that periodical, "the beneficent work of a hospital, a college or a laboratory is destined to be more lasting and by its name to perpetuate a man's memory more forcibly."

The project certainly constitutes a happy expression of sentiment—the prime object to be kept in view—and yet aims to aid in an extremely practical manner the profession to which Dr. Bull was so devoted a servant. It would promote both the benevolent and scientific agencies of which his life was a striking embodiment. Realising, as he did, the limitations of surgical knowledge, Dr. Bull himself might well have wished that any tribute to him should take such shape.

University Day

THE faculty and students of the University of Buffalo, assisted by ministers, lawyers, doctors, dentists, city, county officials and others, held the annual University Day exercises at the Teck Theater February 22, 1909. The exercises form the university's celebration of Washington's Birthday, chosen University day ten years ago. Various patriotic organisations, as well as the students of the four high schools of Buffalo, joined in the celebration. The orator of the day was the Reverend Dr. Andrew V. V. Raymond, pastor of the First Presbyterian Church.

The students, including those from the high schools, marched from the university buildings at High street, down Main to Chippewa, then back to the Teck. The academic procession into the theater was led by Vice-Chancellor Charles P. Norton, who escorted the Reverend Dr. Raymond to the stage. The stage and other portions of the theater were decorated with flags and bunting and pictures of Washington.

The Reverend Dr. F. A. Kahler delivered the invocation, after which Mr. Norton introduced the Reverend Dr. Raymond. Dr. Raymond's address was on The Relation of Higher Education to the Life of the City.

The speaker characterised Washington as America's champion of justice and liberty. He said that it was proper upon the celebration of the anniversary of his birth to dwell upon the principles underlying American institutions; liberty and equality of opportunity.

"A larger life is the inalienable right of every man," said Dr. Raymond. "Life itself answers the question as to the natural end or aim of living—namely, increase, more life, abundant life. The struggle should not be simply to live, but to unfold all the

latent energies of life. I desire to emphasise this; that a man's business or profession is not the great end for which he is living, but the real end is the largest possible development of himself as a man.

"Education is the essential development of the ability to appreciate and choose the best things," said the speaker. "We are told that education, that religion must be practical nowadays and that only practical men can meet the demands of the present time. By the term practical, we generally understand that if a man lives so that he is able to build a fine house, to furnish it magnificently, if he lives so as to leave a fine fortune and provide in his will for a fine monument to be built on the finest lot in the finest cemetery in the city; if he lives such a life, he is a practical man.

"Then what a fool Lincoln was, if that be true, to live so that the only thing he could leave was a name and the only fortune was the love and gratitude of a nation. But what is greater than a name, I ask? What more practical man ever stood on this land of ours than Washington, leaving only a name, but a name that lives through generations."

THE first class of Filipino physicians trained under the American rule received their degrees from the Philippine Medical School at Manila, February 27, 1909. The dean of the faculty, Dr. P. C. Freer, formerly of the University of Michigan, presided over the commencement and addresses were delivered by commissioners D. C. Worcester and Newton W. Gilbert and Senor Rafael Palma, a member of the Philippine Assembly. Forty Filipino women who are studying to become trained nurses attended the ceremony.

THE committee appointed last year by the Medical Society of the State of New York to act jointly with a committee representing the State Bar Association to investigate the evils growing out of the employment of medical experts, under the present methods, reported back to the society at its recent annual meeting that the law should authorise the appellate divisions to appoint not less than ten or more than sixty physicians in the different judicial departments, who shall be qualified to act as medical experts, and that the expense of their service shall be borne by the county in which the action is tried.

IN 1908, the total number of bodies disposed of by cremation in Germany was *The British Medical Journal* says, 4,050, as against 2,977 in 1907, showing an increase of 1,073, or 36 per

cent. Among those whose bodies were cremated were 1,474 women. The classification according to religious creeds gives some interesting results. While the majority of persons cremated were described as Lutherans, there was a considerable body of Catholics, notwithstanding the prohibition issued by Leo XIII. For some reason, in Germany, as in France, cremation does not seem to appeal to Free Thinkers. In 2,517 cases, all coming under the head of Lutherans, the incineration was accompanied by religious rites.

THE Academy of Sciences at Vienna has decided upon the creation of phonographic archives, which will be divided into three parts, and which will probably be the most remarkable library on record. The first section will be devoted to examples of European languages and dialects of the different peoples spoken at the beginning of the twentieth century. The second will contain examples of music and song of the same period, while the third section will be reserved for the records of contemporary orators.

PROFESSOR GREEF, director of the Berlin eye hospital, announced at Berlin, March 26, 1909, the discovery of the trachoma germ. He says his experiments with the germs on anthropoid apes convinced him that trachoma is contagious in its early stages.

AN educational campaign by means of speeches and posters is being carried on under the direction of the Chicago Tuberculosis Institute in support of the question to be submitted to the voters at the next election to determine whether or not the citizens agree to a tax being levied for the establishment and maintenance of sanatoria for consumptives. Physicians who are desirous of establishing the institutions will go on the platform before various organisations and at meetings and will explain why the people should vote "Yes" on the question. Posters are being distributed in every section of the city in various languages pointing out the great loss of life annually in Chicago from the white plague.

THE abolition of the Chappaqua Mountain Institute, in Westchester County, which was for years an excellent seminary of learning, will be regretted by many, but there will be consolation in knowing that its buildings and its particularly beautiful and salubrious site are to be used as a suburban sanatorium by the Children's Aid Society, under the generous endowment given by Mrs. Elizabeth Milbank Anderson. The establishment of such an institution will materially enlarge and facilitate the good work

of that society, and it could probably not have been effected in a more desirable place than among the mountains and forests of Chappaqua.

NAVY TO HAVE MEDICAL RESERVES.—The Secretary of the Navy has approved the recommendation of the surgeon-general for the establishment of a naval reserve medical corps similar to that recently organised in the army. This is to be in connection with the development and reorganisation of the naval militia, and was among the recommendations made by Surgeon-General Rixey this year. It is purposed to establish the reserve corps on the same basis as that branch of the army medical department, and to commission in the navy medical reserve corps the provisionally qualified candidates who are examined with a view to appointment in the regular medical corps of the navy. By this means they will serve a probationary period, during which they will be specially instructed at the Naval Medical School, in Washington. This branch will enable the Navy Department to obtain contract surgeons to assist the regular doctors at naval hospitals, and will afford the means of expanding the medical corps in time of war.

PERSONAL.

DR. FREDERICK W. KOEHLER of 582 Broadway, Buffalo, has been appointed an inspector of food and drugs in the Health Department and has been assigned to inspect eight or nine small slaughterhouses in the city which have not been heretofore inspected.

Dr. Koehler was certified by the Civil Service Commission and he was the only one on the list, with a percentage of 90.88. eight other doctors taking the examination having failed to pass.

DR. GUSTAV A. HITZEL, of Buffalo, was re-elected president of the German-American Alliance at the recent annual meeting of the delegates, representing 7,500 members. Under Dr. Hitzel's administration the organisation has greatly increased in membership and enthusiasm, and has successfully undertaken important work.

DR. ARTHUR LE ROY PULVER, late house surgeon at the Buffalo General Hospital, and Mrs. Pulver, left Buffalo, recently to reside at Wellsville, N. Y.

DR. GEORGE F. COTT, of Buffalo, read a paper at a recent meeting of the Medical Society of the County of Ontario held at Canandaigua. Dr. Cott's subject was "Acute Endolabyrinthitis with Autointoxication."

OBITUARY

DR. HAMILTON D. WEY, of Elmira, N. Y., died March 16, 1909, at Callao, Peru, whither he went sometime ago, for the benefit of his health, aged 54 years. He was the only son of the late Dr. William C. Wey, himself a leading member of the medical profession in this state. The son, the subject of this memoir, received his medical degree from the New York University Medical College in 1878, and soon afterward became associated with his father in the practice of medicine, and so continued until the death of the latter in 1897. Since that time Dr. Hamilton D. Wey has been recognised as one of the foremost practitioners in the Southern Tier of counties.

Dr. Wey was elected president of the Medical Society of the State of New York in January, 1904, and presided at the annual meeting held in January, 1905. During this year,—namely, in May, 1904, he lost his only son, a bright little fellow of about four years, a sad blow to both parents. He was a member of the American Medical Association of the Elmira Academy of Medicine of which he had been president: consulting physician to the Arnot-Ogden Memorial Hospital, and a member of several other organisations including the Elmira Club.

Dr. Wey, in addition to his superb professional equipment, was like his father, a man of thorough training, a citizen of worth, and a most companionable man in every way. His loss will be deeply felt, not only in Elmira, but throughout the State.

DR. WILLIAM NISBET, of Avon, died at his home in that village February 26, 1909, aged 60 years. He had been ill for about a year and a half with heart disease.

William Nisbet was born at Dalbeattie, Scotland, January 22, 1826. He received his early education there and at Edinburg Medical College. He then spent five years in Europe in study and research, taking his degree from University of Goetengen, Germany.

In 1850 he came to Livingston County settling at Avon, where he has lived since. When he began practising in Avon, he was the only regular physician within a radius of 25 miles. He built up a large and successful practice, conducting a drug store also.

He was a charter member of the Medical Society of the County of Livingston and for many years the leading physician in that section of the country, patients coming to him for twenty miles around.

In December, 1855, he married Miss Eliza Nowlen, of Avon, who died in August, 1904. Six children were born to them, three

of whom survive him. Charles S. Nisbet of Amsterdam, Nan-nie Nowlen Nisbet and Harriet Louise Nisbet, both of that vil-lage; also one sister, Mrs. Joseph Newall, of Dalbeattie, Scotland.

DR. THADDEUS ASBURY REAMY, of Cincinnati, died in that city March 11, 1909, aged 79 years. He graduated from Starling Medical College, Columbus, Ohio, in 1854, and received the de-gree of arts from Ohio Wesleyan University, 1868; and LL.D., from Cornell in 1889. He began teaching in the Cincinnati Col-lege of Medicine and Surgery in 1858. He was a pioneer in the field of gynecology in the middle west, became president of the American Gynecological Society in 1885, and obtained extensive membership in medical organisations besides being a large con-tributor to the literature of his specialty.

DR. ALFRED DAY, of Buffalo, died at his home in this city Febru-ary 12, 1909, aged 75 years. He graduated at the University of Buffalo in 1887.

SOCIETY MEETINGS.

THE Fifth Annual Conference of the Council on Medical Educa-tion of the American Medical Association will be held at the Auditorium Hotel, Chicago, Monday, April 5, 1909.

PROGRAM.

10.00 A. M.—*Morning Session.*

Address of the Chairman, Arthur Dean Bevan, Chicago; Re-port of the Secretary, N. P. Colwell, Chicago; Report of Com-mittee on Medical Curriculum—Anatomy, including Histology and Embryology, Charles R. Bardeen, Professor of Anatomy, University of Wisconsin, College of Medicine, Madison, Wis.; Physiology and Physiologic Chemistry, Elias P. Lyon, Professor of Physiology, St. Louis University, School of Medicine, St. Louis; Pathology and Bacteriology, William T. Councilman, Professor of Pathology, Harvard Medical School, 240 Longwood avenue, Boston; Pharmacology, Toxicology and Therapeutics, Torald Sollmann, Professor of Pharmacology and Materia Medica, Pharmacologic Laboratory, Western Reserve University, Medical Department, Cleveland, O.; Medicine, including Pedia-trics and Nervous and Mental Diseases; George Dock, Profes-sor of Medicine, Tulane University of Louisiana, New Orleans; Surgery: General and Special, Charles H. Frazier, Professor of Clinical Surgery, University of Pennsylvania, Department of Medicine, Philadelphia; Obstetrics and Gynecology, Joseph B.

DeLee, Professor of Obstetrics, Northwestern University Medical School, Chicago; Diseases of the Eye, Ear, Nose and Throat, George E. deSchweinitz, Professor of Ophthalmology, University of Pennsylvania, Department of Medicine, Philadelphia; Dermatology and Venereal Diseases, William A. Pusey, Professor of Dermatology and Clinical Dermatology, College of Physicians and Surgeons, Chicago; Hygiene, Medical Jurisprudence and Medical Economics, F. F. Wesbrook, Professor of Pathology and Bacteriology, University of Minnesota, College of Medicine, Minneapolis.

2.00 P. M.—*Afternoon Session.*

Some Results of Higher Standards of Preliminary Education, Richard H. Whitehead, Dean of the Department of Medicine of the University of Virginia, Charlottesville. Discussion.

The Character of the State Medical License Examination, Fleming Carrow, Member of the State Board of Registration in Medicine of Michigan, Detroit. Discussion.

THE Association of American Medical Colleges held its 19th Annual Meeting in the Academy of Medicine, 17 West 43d street, New York, March 15 and 16, 1909, under the presidency of Professor Eli H. Long, of Buffalo.

The sessions began Monday, March 15, at 10 o'clock A. M., and were devoted to reports of (a) the Committee on Medical Education; (b) Committee on Equipment of Medical Colleges; (c) Committee on State Medical Examining Boards; (d) Committee on Medical Research; (e) Committee on Medical Teaching; (f) Committee on Curriculum.

In the afternoon session, 2 P. M., papers were read as follows: "Higher Entrance Requirements," Hon. Augustus S. Downing, M.A., Ph.D., LL.D., First Assistant Commissioner of Education, Albany, "The Combined Course," Prof. William H. Carpenter, Ph.D., Columbia University; "The Present Status of Medical Education," Dr. Fred C. Zapffe, University of Illinois; "The Five Year Medical Course." Discussion.

The evening session, 8.30 P. M., was held in the Hosack Hall, New York Academy of Medicine, under the auspices of the Academy. Addresses were made by Dr. John A. Wyeth, President of the Academy of Medicine, "The Medical Student in 1867"; Dr. Eli H. Long, University of Buffalo and President of the Association, "Functions of the Medical School"; and Dr. Henry S. Pritchett, LL.D., President of the Carnegie Foundation for the Advancement of Teaching, "Standards of Medical Education." After the meeting a collation was served.

At the morning session Tuesday, March 16, Report of the

Judicial Council, Report of the Secretary-Treasurer and New Business, were made and considered.

At the recent annual meeting of the Medical Society of the County of Cattaraugus, a special committee was appointed composed of Dr. A. D. Lake of Gowanda, Dr. Edward Torry of Olean, and Dr. F. C. Beals of Salamanca, to investigate and report as to the advisability of establishing a county biological laboratory, the probable cost of installing equipment and of maintenance, and the most desirable place for locating such an institution.

The election of officers resulted in the choice of Dr. W. W. Jones of Dayton for president; Dr. A. D. Lake of Gowanda, vice-president; Dr. Benjamin Van Campen of Olean, secretary and treasurer. The society voted in favor of a joint meeting of the societies of Cattaraugus, Allegany and McKean counties, to be held at Rock city next summer.

THE Buffalo Academy of Medicine held meetings during the month of March, 1909, as follows:

Section on Surgery.—Tuesday evening, March 2. Program:

(1) Description of a Remodeling Operation for Relapsed and Severe Forms of Club Foot, Bernard Bartow; (2) Some Experimental Work on Materials for Plugging Bone Cavities and Sinuses, Prescott LeBreton.

Tuesday evening, March 9, at 8.30 P. M.—Accepted the invitation of The Erie County Pharmaceutical Association to hold a joint meeting of these two bodies and The Erie County Medical Society. This meeting replaced the March meeting of the Section of Medicine. It was held at the rooms of the Society of Natural Sciences, Public Library Building. The Academy was the guest of the Erie County Pharmaceutical Association who presented Dr. William C. Anderson, Dean of the Brooklyn College of Pharmacy. Dr. Anderson read a paper on "The More Extensive Use of U. S. P. and National Formula Preparations to the exclusion of proprietary remedies.

Section on Pathology.—Tuesday evening, March 16. Program: (1) Hemolytic Reaction in Sarcoma, H. G. Sloan, Cleveland, O.; (2) Resuscitation After Apparent Death From Anesthesia, F. C. Busch, and T. H. McKee.

Stated Meeting.—Tuesday evening, March 23. Nominations were made for president, secretary, treasurer and trustee. The section of obstetrics and gynecology provided the following program: Some Interesting Phases in the Life

History of Uterine Myoma, Thomas S. Cullen, Baltimore, M.D. Dr. Cullen is Associate Professor of Gynecology at Johns Hopkins University and Author of Recent Works on Cancer of the Uterus and Fibroid Tumors of the Uterus.

At the One Hundred and Third Annual Meeting of the Medical Society of the State of New York recently held at Albany, the following named officers were elected for the current year: president, Charles G. Stockton, Buffalo; vice-presidents, D. C. Moriarta, Saratoga; J. H. Glass, Utica; J. B. Harvie, Troy; secretary, Wisner R. Townsend, New York; treasurer, Alexander Lambert, New York; chairman of the committee on legislation, Frank Van Fleet, New York; scientific work, Leo H. Neuman, Albany; arrangements, W. J. Nellis, Albany; public health, J. L. Heffron, Syracuse.

THE Rochester Academy of Medicine held meetings during the month of March, 1909, at the Hotel Seneca, as follows.

Section on General Medicine.—Wednesday evening, March 3.

Program: Visceral Transonance, A. L. Benedict, Buffalo.

Wednesday, March 10. Program: Report of a Case of Unusually Large Sarcoma of both Ovaries, Dr. E. W. Mulligan; Good functional result in compound comminuted fracture of the Olecranon involving the Elbow Joint, Dr. L. W. Rose.

Obstetrics, Gynecology, and Pediatrics.—Wednesday, March 24. Program: Psychoses occurring during Pregnancy and the Puerperium, Dr. Eveline P. Ballintine. Discussion was opened by Dr. C. A. Vander Beck.

Public Health.—Wednesday, March 17. Program: The New Sanitation, Professor Charles W. Dodge.

COLLEGE AND HOSPITAL NOTES

THE directors of the German Hospital, it is stated, have decided to build a nurses' home on the lot adjacent to the hospital on Jefferson street, Buffalo. All the money needed, it is said, has been subscribed. The home will cost about \$12,000.

The officers of the hospital for the current year are: honorary president, William Simon; president, William F. Kasting; vice-president, Dr. C. H. W. Auel; secretary, Harry J. Knepper; treasurer, Henry vom Berge; auditing committee, Ottomar Reincke and Jacob J. Lang; membership committee, Henry C. Zeller and Joseph G. Schaff.

THE Buffalo General Hospital Alumni Association held its annual dinner February 19, 1909, at the Hotel Statler. Dr. Peter W. Van Peyma was toastmaster and the speakers were Drs. Charles G. Stockton, Carlton C. Frederick, Marcell Hartwig, Renwick R. Ross and John H. Pryor. Dr. Roswell Park read a paper on "The Next Quarter Century in Surgery." Between the dinner and the speeches an entertaining minstrel show was enjoyed by the members. Seventy-nine covers were laid.

THE Howe Eye Hospital recently filed incorporation papers in the County Clerk's office. The directors are Dr. Lucien Howe, Elizabeth M. Howe, Sallie B. Howe, William Delancey Howe, James N. Adam, Charles P. Norton and Roswell Park.

THE Waldorf-Astoria was the first New York hotel to recognise the importance of its own hospital, and every one said when the emergency ward was opened in the autumn: "No one but George Goldt would ever have thought necessary or carried out such a project in a hotel." For a long time a prominent firm of chemists has conducted a branch shop in the basement of the Waldorf, which has been kept open all night long. One of the basement rooms was lined with white tiling, and there was installed therein an operating table, rubber tired roller couch, cases of surgical instruments and a complete sterilising outfit. The resident house physician at the Waldorf is in charge of the room, with his brother as his assistant and a professional nurse in attendance.

BRIGHT, airy, spotlessly clean, modern in every detail from the receiving room to the solarium on the roof, with hardly a square inch in it that the hose cannot be turned upon, the new Jewish Maternity Hospital at Nos. 270 and 272 East Broadway, was dedicated at 2 p. m., Sunday, January 17, 1909. The building will cost \$90,000, and the \$30,000 raised so far came in voluntary contributions, in sums ranging from 25 cents to \$500. On voluntary contributions it will have to subsist, for there is no fund, no endowment, and every one of the sixty beds are free. Though built by Jews, it will be non-sectarian; any woman, Jew or Gentile, Catholic or Protestant, who needs its care will be received.

The room in which the dedication exercises was held, on the first floor, is the one the physicians and board of directors are proudest of. This room is to be a nursery where the children of the patients will be taken care of by a matron and her helpers.

"Most of these poor mothers have little children," said Dr. A. M. Hilkowich, secretary of the board of directors. "There is no one to leave them with at home, and a woman will refuse to go to the hospital—she would rather be confined in her unsanitary

tenement home, often consisting of a kitchen and one little dark room, where there is no gas and one must attend her by the light of a candle or a smoky lamp—she would rather stay there than leave her children. That is why we felt the nursery to be an important part of the hospital. The mother can be content, knowing her children are well cared for.”

All the floors of the hospital are of hard wood covered with shellac. The walls are painted a pale yellow, the metal work pure white. The lights in the wards are arranged so that there will be no glare—just a soft, diffused glow.

There are a few private rooms. The charge will be low for these, and if a patient needs to be alone and has no money, the hospital will try to find the money. There will be fifteen nurses, and an obstetrical training school will be maintained in connection with the hospital.

The attending physicians are Dr. J. Heller, Dr. A. J. Rongg, Dr. N. Ratnoff and Dr. A. M. Hilkowich. The consulting physicians are Dr. Ralph Waldo and Dr. S. W. Bandler. The Rev. Philip Joehes is president of the hospital. The organisation got its charter two years ago, and since then has done outdoor relief work, taking care of about eight hundred women. It was in the course of that work that the sore need of a hospital for maternity cases in that part of the city was seen.

At the dedicatory exercises Mrs. William Einstein, on behalf of the women of New York, formally received the key of the hospital from the board of directors.

MCGILL UNIVERSITY CELEBRATES.—Fifty graduates of McGill University, Montreal, drank a toast to “The President; the King,” in the college-room of the Hotel Astor, Thursday night, March 25, 1909, and with a shout of “they are jolly good fellows,” started in to prove that New York and McGill are not so far apart after all. They succeeded all the better because they had Dr. William Peterson, president of the university, and Dr. Frank D. Adams, dean of the faculty of sciences, to give the graduates a bit of Canadian atmosphere.

Dr. Peterson, in his speech about the university, told the alumni one thing that brought forth cheers. The Carnegie Foundation has appointed a committee to go around the country and assess the value of the medical educations taught in the various colleges. This is with the purpose of improving the curricula generally, that better physicians may be graduated.

Dr. Peterson told the McGill men that the committee called on him a short time ago. He called on Mr. Pritchett, the head of the Carnegie Foundation, today, and was told that McGill medical school would go way to the top of the list; that only

Harvard and Johns Hopkins approached it in excellence. Another thing that Dr. Peterson called attention to was the great work McGill is doing in bringing together the various races in Quebec Province, molding them into a unit, "without which Canada will never be a great nation."

Dr. Peterson said that without wishing to talk finances at all, he was going to smite the people of Toronto for the way in which they treated McGill. If McGill were a corporation, he said, the directors would have to close up shop. He intimated that Lord Strathcona and Sir William McDonald, although he did not mention them by name, had come to the rescue of McGill and prevented the threatened shutdown. Montreal was singularly apathetic and although the citizens gave some financial assistance, it was nothing compared to what they could do if they would.

The other speakers were Dean Adams, C. W. Miller of Queens College and H. F. Ballantyr of Toronto.

BOOKS AND AUTHORS.

Constipation and Intestinal Obstruction (Obstipation). By **Samuel Goodwin Gant**, M.D., LL.D., Professor of Diseases of the Rectum and Anus, in the New York Post-graduate Medical School and Hospital; attending surgeon for Rectal Diseases at the New York Post-graduate and Saint Mary's Hospital, and the German Polyclinic Dispensary. With 250 original illustrations. Philadelphia and London: W. B. Saunders Company. 1909. (Price, \$6.00 net).

The author of this work has constructed a treatise on somewhat new lines. It would astonish the old fashioned family doctor, to read a scientific work by a scientific man, advocating the drugless treatment of constipation, treating it without medicine. The old fashioned layman, too, would be surprised. He wants "physic" as he calls it, and plenty of it. It should not be inferred from this that Gant gives no medicine at all in the treatment of constipation; but it is his choice to treat the condition by other means, such as psychotherapy, diet and physical measures—for example, bodily movements, massage, mechanical vibration, electricity, and the like. He thinks he can obtain quicker and more lasting benefit by non-medicinal and, when necessary, by surgical measures, hence seldom administers drugs as curative agents; but in the symptomatic treatment of constipation he resorts to medicines occasionally. Gant is explicit in the details of the surgical procedures he employs. He is an experienced operator with excellent surgical judgment which makes his statements trustworthy. It is refreshing to read a book by an author who, having already written a surgical treatise, now puts forth one advocating other means of treating certain diseases or disorders of the intestinal tract.

We must speak of the illustrations two hundred and fifty in number, all of which are original. Seldom have we seen such a

large number of original illustrations in one book that are so clearly explanatory of the text. We think this treatise will take rank as one of the exceptionally valuable additions to the medical literature of the year 1909. At any rate it sets a pace in that regard that will serve as a challenge to others, and one which will be difficult to out run.

A Textbook of Genitourinary Diseases, including Functional Sexual Disorders in Man by **Dr. Leopold Casper**, professor in the University of Berlin. Translated and edited by **Charles W. Bonney**, B.L., M.D., Assistant Demonstrator of Anatomy in Jefferson Medical College, Philadelphia, etc. Second edition revised and enlarged with 23 illustrations and 24 full page plates, of which 8 are in colors. Philadelphia: P. Blakiston's Son & Co. 1909. (Price, \$5.00).

The crucial test of a first edition once withstood makes the anxiety of subsequent editions much less. When Bonney, two years and a half ago, introduced Caspar to the American profession he told us that in his belief the book of the distinguished German professor represented the best teaching of genitourinary diseases then available. His judgment proved good. In this new edition revision has been thorough, some sections having been rearranged, others amplified, and much new material added, including a few new illustrations. A number of American urethroscopes, cystoscopes, and other instruments are described, among which Brandsford Lewis's universal cystoscope, latest model, is given a prominent place both in illustration and text. Caspar calls it a clever invention. The Brandsford Lewis operative cystoscope with accessories is also illustrated and commended. The additions made by Bonney are inclosed in brackets and he has done his work well. The treatise is one of the foremost in genitourinary diseases and contains the recent advances in this special line of practice.

Medical Inspection of Schools. Russell Sage Foundation. By **Luther Halsey Gulick**, M.D., Director of Physical Training, New York Public Schools, and **Leonard P. Ayres**, General Superintendent of Schools of Porto Rico, 1906, 1908. New York Charities Publication Committee. (Cloth, \$1.00.)

This is the second book published by the charities publication committee acting for the Russell Sage foundation, the first being the campaign against tuberculosis and was noticed in these columns last month. This volume is announced as one of the by-products of the Backward Children Investigation, a research supported by Russell Sage. It is a most important publication and is well worth the attention of both doctors and teachers. It is the first volume of medical inspection of schools published in this country.

The book places before the reader in convenient form for easy reference information concerning the historical, medical, educational, administrative, and legal phases of the work of medi-

cal inspection of school children. The most extensive bibliography of the subject yet compiled is added—an important feature of special value to librarians, school authorities, and students of sociological subjects. Single copies, postpaid, \$1.00. Charities Publication Committee, 105 East 22d Street, New York.

Report of the Commission of 1906 to Investigate the Condition of the Blind in the State of New York. F. Park Lewis, M.D., Buffalo, President. Transmitted to the legislature April 10, 1907.

This is a most interesting report as well as an instructive one. It shows what the blind can do when industrial environment is provided. It proves it to be the duty of the state to provide ways and means to make every capable blind person self-sustaining. The president of the commission, Dr. F. Park Lewis of Buffalo, is enthusiastic on this point, as well as upon the feasibility of preventing say 30 per cent. of the blindness that is occurring in the United States. To do this, of course, means scrupulous care of the eyes of the new born. It means that when the head emerges from the birth tract, the eyes of the newly arriving passenger should be carefully wiped with an aseptic cloth dipped in a mild antiseptic solution; it means, further, that as soon as the infant is born its eyes should be washed perfectly clean and a 1 per cent. solution of silver nitrate should be instilled in the eyes, one drop in each eye being quite sufficient. If this be done under the careful instruction given by Credé, who first advised this method, it will be found an all-sufficient prophylaxis against ophthalmia neonatorum.

Dr. Lewis is a strenuous advocate of this method and believes were it adopted as routine, it would serve to prevent quite 30 per cent. of blindness now due to infection from the birth tract of the mother.

The report is full of interest and all persons engaged in the care of the blind or interested in their welfare may find pleasure in reading the book. It is profusely illustrated with half-tone engravings.

Proceedings of the American Medico-Psychological Association at the sixty-third annual meeting held at Washington, D. C., May 7, 10, 1907. C. W. Pilgrim, M.D., Secretary. Published by the Association. 1907.

This being the oldest of the national special societies is also the largest in membership and its roll contains the names of many men of unusual ability. Its transactions, likewise, contain every year papers of excellence. This book presents twenty-four papers and the discussions on the same besides reports of committees on scientific, as well as other subjects. The president's address by Dr. Charles G. Hill of Baltimore, is of exceeding interest, the title being, "How can we best advance the study of Psychiatry?" It is a paper showing broad scholarship on the part of its author and was heartily enjoyed by the audience. Many of the papers merit reading by men interested in the care of psychiatric pati-

ents, and all contribute to a better understanding of their management.

Saunders's Pocket Medical Formulary. With an appendix containing many useful tables, and suggestions for treatment in emergency conditions. By **William M. Powell**, M.D., member of the Philadelphia pathological society, etc. Ninth edition, thoroughly revised, and enlarged. Philadelphia and London: W. B. Saunders Company. 1909. (Price, \$1.75 net).

The popularity of this formulary cannot be questioned since it is now in its ninth edition. Its usefulness, too, cannot be doubted, especially for the junior practitioner. We are not of those who believe that prescriptions should always be formulated extemporaneously in the presence of the patient. This book contains many that have been tried and stood the test, each bearing the signature of the author. It is a convenient book of reference for the office table, or may be carried in the pocket, the binding being strong leather.

The National Standard Dispensatory—containing the National History, Chemistry, Pharmacy, Actions and Uses of Medicines, including those recognised in the Pharmacopeias of the United States, Great Britain and Germany, with many references to other foreign pharmacopeias. In accordance with the Eighth Decennial Revision of the U. S. Pharmacopeia, by authorisation of the convention. By **Hobart Amory Hare**, B.Sc., M.D., Professor of Therapeutics and Materia Medica in Jefferson Medical College, Philadelphia; **Charles Caspari, Jr.**, Ph.G., Phar. D., Professor of Theoretical and Applied Pharmacy in the Maryland College of Pharmacy, Baltimore; and **Henry H. Rusby**, M.D., Professor of Botany and Materia Medica in the College of Pharmacy of the City of New York; Members of the Committee of Revision of the U. S. P.; New (2d) edition, thoroughly revised. Imperial octavo, 2050 pages, with 478 engravings. Cloth, \$6.00, net; full leather, \$7.00, net. Thumb-letter index, 50 cents extra. Lea & Febiger, Publishers, Philadelphia and New York.

The value of this colossal work to those who in any way have to do with drugs cannot be estimated. It opens with the text of the pure food and drugs statutes of 1906, which places the law at hand for convenient reference by every owner of the book.

Of the high authority of the work emanating from such masters as Hare, Caspari, Rusby, Geisler, Kremers and Base, it is unnecessary to speak. In short, this great encyclopedia of the latest pharmacology, pharmacy and therapeutics, is recognised as the leading reference for every one concerned with drugs, their manufacture, dispensing and medicinal uses. The *general index*, of 120 three-columned pages, contains in one alphabet the names of drugs in English, French, German, Italian, Spanish and Latin, rendering it easy to find the article on any substance used in medicine by civilised nations. This applies to the minor as well as the major drugs of the world, an inestimable service peculiar to this book. The *therapeutic index*, of 20 three-columned pages, arranged under diseases, brings most suggestively to the mind of the physician every drug of value, and guides him to the directions for its use.

The standard dispensatory is recognised authority the world over, and is quoted as such everywhere that medicine is known.

Transactions of the American Otological Society. Forty-first annual meeting, held at Atlantic City, N. J., June 23, 24, 1908. Vol. XI., part 1. Edited by **Dr. J. F. McKernon**, Secretary, 62 W. 52d St., New York. Published by the Society. Mercury Publishing Co., Printers, New Bedford, Mass. 1908.

This society is the second oldest of the national special societies, its only senior being the American Medico-Psychological Association, whose annual volume is noticed elsewhere in this issue. This volume begins with an obituary notice of Dr. D. B. St. John Roosa, which contains in its opening sentence a striking error. It says Dr. Roosa died February 10, but does not say in what year; whereas, the fact is Dr. Roosa died March 8, 1908.

The volume contains the usual number of scientific papers, the most prominent being a symposium on otosclerosis. The meeting was held under the presidency of Dr. C. J. Kepp, of Newark, N. J. The secretary is Dr. James F. McKernon, of New York.

Transactions of the Thirtieth Annual Meeting of the American Laryngological Association held at Montreal, Canada, May 11, 12, 13, 1908. New York: Published by the association. The McConnell Printing Company, printers. 1908.

The annual volume put forth by this association is always welcome to our table. The book before us is no exception to the rule and contains some unusually interesting material. The president, Dr. Herbert S. Birkett, of Montreal, chose as the subject of his address "A brief account of the history of medicine in the Province of Quebec from 1535 to 1838." It is a most interesting bit of medical history, not easily obtained and forms a fitting prelude to the group of scientific papers that follow. Of these latter a "Symposium on Sinus Diseases" presented an interesting exposition of several forms of sinusitis. The paper of Dr. John O. Roe, of Rochester, on "Methods of opening the Maxillary Antrum," with presentation of a new instrument offered opportunity for an interesting discussion. Dr. Roe presented his position clearly and his ingenious instrument will simplify the technic of the operation he advocates. The entire book possesses unusual interest.

Fourth Annual Report of the Henry Phipps Institute for the study, treatment and prevention of tuberculosis. February 1, 1906 to February 1, 1907. Edited by **Joseph Walsh**, A.M., M.D. Published by the Henry Phipps Institute. 1908.

This remarkable institute, founded and endowed by Henry Phipps, Esq., issues each year a wonderful report of the work performed. It has an able medical staff, headed by Dr. Lawrence F. Flick, as medical director. This report, however, is edited by Dr. Joseph Walsh, whose name stands at the head of the medical staff. The clinical and sociological report of the

year is prepared by the medical director and we cannot do better, in attempting to describe briefly the nature of the report than to quote from Dr. Flick's opening paragraphs.

One of the functions of the Phipps Institute, says the report, is to gather clinical and sociological data for scientific deductions. With this end in view every patient is subjected to searching inquiry into his personal and ancestral history, and is given a careful physical examination at the time when he comes under treatment. Mode of life, occupation, associations, previous diseases, deformities, and even mental attitude are studied and recorded. The physical examination includes every important organ of the body, and a record is made of the healthy as well as the unhealthy part, in order that nothing may be overlooked and that the record may show that all parts of the body have been examined.

The records of each year are bound in chronological order and preserved for reference. The annual report of the institute is made from these records, and the scientific problems which are worked out by members of the staff and recorded in the annual report are, as a rule, based upon the data contained in these records.

The material of the report is of value to all interested in the study, prevention, and treatment of tuberculosis.

Transactions of the thirty-fourth annual meeting of the Oregon State Medical Association held at Portland, Oregon, July 1, to 3, 1908. **William House, M.D.,** secretary.

This association is well organised and publishes its transactions in good form each year. Dr. William House, formerly of Buffalo, is the secretary, in which capacity he has served for some years. We may be pardoned for suggesting the propriety of recurring head lines at the top of each page, as they add to the appearance of the book. The president, Dr. R. C. Coffey, of Portland, chose for the subject of his address "Organisation and Centralisation of Medicine and Surgery in the Northwest." In the course of the address we observe that Dr. Coffey deals with medical education, especially with the state examining boards and medical journals as factors in the scheme of medical education. He indorses the purchase of the two journals in Oregon and their consolidation into one, this to be owned and managed by the association.

Honorable Tracy C. Becker, of Buffalo, addressed the association in the evening of the second day. His subject being "Is a System of State Medicolegal Experts Practicable or Possible?" Judge Charles E. Wolverton, of the United States District Court, opened a discussion on Mr. Becker's address, displaying a broad culture and eminent legal ability. Others took part in the discussion, including Dr. William House, making it early a leading feature of the meeting, and adding very considerably to the value of the book.

BOOKS RECEIVED.

Primary Studies for Nurses: A Textbook for First Year Pupil Nurses. By Charlotte A. Aikens, formerly Superintendent of Columbia Hospital, Pittsburg, and of the Iowa Methodist Hospital, Des Moines. 12 mo. of 435 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1909. Cloth, \$1.75 net.

Practical Dietetics with reference to Diet in Disease, by Alida Frances Pattee, graduate, Boston Normal School of Household Arts. Late Instructor in Dietetics, Bellevue Training School for Nurses, Bellevue Hospital, New York City. Fifth edition. 12 mo, cloth. 300 pages. A. F. Pattee, Publisher, Mt. Vernon, N. Y. New York Office, 52 West 39th St., N. Y. (Price, \$1.00 net. By mail, \$1.10. C. O. D. \$1.25.)

Refraction and How to Refract, including sections on Optics, Retinoscopy, fitting of Spectacles and Eye Glasses. By James Thorington, A.M., M.D., professor of diseases of the eye in the Philadelphia Polyclinic and College for graduates in medicine, etc. Fourth edition. Two hundred and twenty illustrations, thirteen being in colors. Philadelphia: P. Blakiston's Son & Company. 1909. (Price, cloth \$1.50.)

Parcimony in Nutrition, by Sir James Crichton-Browne, M.D., I.L.D., F.R.S. 12 mo. Funk & Wagnalls Company, New York. (Cloth, 75 cents, net.)

Report of the United States Commissioner of Education, for the year ended June 30, 1908. Volume 1. Washington Government Printing Office. 1908.

Theory and Practice of Infant Feeding with notes on development, by Henry Dwight Chapin, A.M., M.D. Professor of Diseases of Children. New York Post-Graduate Medical School and Hospital. Third edition, revised, with illustrations. New York: William Wood & Co. 1909.

New and Nonofficial Remedies. Articles which have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association, prior to January, 1909. Chicago: Press of the American Medical Association, 103 Dearborn Avenue. (Paper, 25c; cloth, 50c.)

Epoch-Making Contributions to Medicine, Surgery, and the Allied Sciences; being reprints of those communications which first conveyed Epoch-Making observations to the scientific world, together with biographical sketches of the observers. Collected by C. M. B. Camac, M.D., of New York City. Octavo of 435 pages, with portraits. Philadelphia, London. W. B. Saunders Company, 1909. Artistically bound, \$4.00 net.

A Textbook of Medical Chemistry and Toxicology. By James W. Holland, M.D., Professor of Medical Chemistry and Toxicology, Jefferson Medical College, Philadelphia. Second revised edition, octavo of 655 pages, fully illustrated. Philadelphia and London: W. B. Saunders Company, 1908. (Cloth, \$3.00 net.)

A Textbook of Materia Medica, Pharmacology and Therapeutics. By George F. Butler, M.D., Professor and Head of the Department of Therapeutics and Professor of Preventive and Clinical Medicine, Chicago College of Medicine and Surgery, Medical Department Valparaiso University. Sixth edition, revised and enlarged. Octavo of 708 pages. Philadelphia and London: W. B. Saunders Company, 1908. (Cloth, \$4.00 net, half-morocco, \$5.50 net.)

International Clinics. A Quarterly of Illustrated Clinical Lectures and especially prepared articles on Treatment, Medicine, Surgery, Neurology, Pediatrics, Obstetrics, Gynecology, Orthopedics, Pathology, Dermatology, Ophthalmology, Otology, Rhinology, Laryngology, Hygiene and other topics of interest to students and practitioners. Edited by W. T. Longcope, M.D., Volume I. Nineteenth

series. Philadelphia and London: J. B. Lippincott Co. 1908. (Cloth, \$2.00.)

Progressive Medicine. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M.D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Vol. XI, No. 1, March, 1909, Octavo, 277 pages. Per annum, in four paper-bound volumes, containing 1,200 pages. Lea & Febiger, Publishers, Philadelphia and New York: (\$6.00, net; in cloth, \$9.00, net.)

MISCELLANY.

SCIENTIFIC DIETIST.—Philippine Service.—The United States Civil Service Commission announces an examination on April 14, 1909, to secure eligibles from which to make certification to fill a

vacancy in the position of scientific dietist, \$900 per annum, for duty in the Philippines, and vacancies requiring similar qualifications as they may occur there. Board and quarters are furnished to the occupant of this position. Competitors will not be assembled for any of the tests. The examination will consist of the subjects mentioned below, weighted as indicated:

SUBJECTS.	WEIGHTS.
1. Thesis of not less than 500 words on a subject relating to dietics (to be submitted with application)	25
2. Experience (rated on application Form 375) ..	75
Total	100

Applicants must show in their applications that they have had extended experience in supervising and directing the formulating, preparing and serving of dietaries suitable to the needs of invalids or convalescents, such experience to have been acquired in an executive capacity in hospitals or similar institutions. Both men and women will be admitted to this examination. Age limits, 20 to 40 years on the date of the examination.

No application will be accepted unless properly executed and, with the material required, filed with the Commission at Washington prior to the hour of closing business on April 14, 1909. In applying for this examination the exact title as given at the head of this announcement should be used in the application.

THE Messina earthquake is to be effectively described in the forthcoming *Century*. Mr. Robert Hichens, the novelist, will present a narrative of his observations and experiences during and after the catastrophe, and Professor Perret, who has been an assistant in the observatory of Vesuvius has contributed a scientific account of it.

BUFFALO MEDICAL JOURNAL.

VOL. LXIV.

MAY, 1909.

No. 10

ORIGINAL COMMUNICATIONS.

Improved Medical Course

By I. NEWTON SNIVELY, A. M., M. D.

Dean and Professor of Materia Medica, Therapeutics and Clinical Medicine in the Medical Department of the Temple University, Philadelphia, Pa.

THE TEMPLE UNIVERSITY CORRELATED SYSTEM OF TEACHING MEDICINE.

THE modern phenomenal growth in the medical sciences, both basic and collateral, has added to the labor of acquiring a medical education far out of proportion to the college term. Co-incident with this growth has come the natural demand for broader and higher medical training. This has necessitated changes in college work and has led to the introduction and development of a system, in which a preponderance of time is given to the minor branches and to special forms of laboratory work and other clinical and auxiliary methods of instruction. But these innovations, by which an ever-increasing proportion of the college hours has been devoted to so-called practical and laboratory instruction, have only served to emphasise what leading men in this department of work now recognise as a great error in present-day medical instruction.

DEMANDS OF OLD SYSTEM PRACTICALLY IMPOSSIBLE TO STUDENT.

This error is the common practice of over-loading students with an array of facts, figures and formulæ for which he has no use, because he has not yet acquired the mental acumen to place them in their true relations to the remaining subjects of the course. Each department of instruction, with its course of didactic lectures and its independent supplemental laboratory work, is a complete unit, if not intentionally, then at least in effect "a water tight compartment" as one critic most aptly designates it. The professor in charge, be he a general practitioner or a specialist, always in effect unduly exalts and isolates his own department and minimizes that of his colleagues.

The medical course has been lengthened and in many instances the teaching force increased to a small army. But the major increase was always in the subject matter in the curricu-

lum, and each year has only augmented the disparity between materials and time of instruction. Hitherto the students' powers have been largely overlooked, save only in the doubling up of his entrance requirements.

The effect, where the student could measure up to the demands of the college, was to make multispecialists of the undergraduates. But it is a legitimate question whether any of the matriculates adequately measure up to these exacting requirements. Be this as it may, it is a frequently lamented fact that many of the medical graduates in the past entered upon their life work with minds crammed with knowledge, the bulk of which they had neither the inclination nor the training to systemise and which they simply had to forget.

Fortunately for the student very much of this almost endless attention to details and overlapping of subjects is neither necessary nor advantageous. This we hope to elucidate below. It is strange that medical schools have in the past so disregarded the great laws of education and mind culture and that their methods of instruction are still, in the main, those employed in the district public schools twenty-five and more years ago.—“the pouring in process.” Each professor systematises his own work, but quite independent of the work of the other professors. There is no pre-arrangement of subjects; no effort to coördinate instruction. The method of instruction is haphazard. In one college day the student is required to take up as many widely differing subjects as there are study periods. At one and the same time he may be taught the physiology of the brain, the anatomy of the liver, diseases of the heart, pathology of the kidneys, and therapy of lung diseases. There is no logical sequence in the order in which he is obliged to take up these several subjects. The result to the student is failure to correlate and assimilate much that has been presented and inevitable discouragement.

NEW DEPARTURE IN MEDICAL COLLEGE INSTRUCTION:

What solution of this problem has been found? Clearly enough the demand of the day is for concerted effort on the part of the teaching force. The relationship and interdependence of the several branches of study, particularly the manner in which the principles of one study elucidate the facts of another, must be emphasised. By pre-arrangement of the subject matter and mutual coöperation of the instructors the entire course of study must be kept, in bird's-eye view, before the student. In other words, the solution is to be sought in a correlated curriculum.

Several years ago the Medical Department of Temple University, recognising this need, adopted somewhat tentatively and in part, a correlated plan of instruction. The results were so

favorable that the present correlated course was formally introduced in 1902 as a new departure in medical college instruction. Since then the scheme has been elaborated from year to year till now practically the entire curriculum is embraced.

FUNDAMENTAL PRINCIPLES OF CORRELATED SYSTEM:

A statement of a few of its fundamentals will help to understand this correlated course. physiology and anatomy, the best established sciences of the entire course, are basic sciences. Disease—that is, pathology—is morbid physiology and morbid anatomy. All nature tends rather to health than to disease. Clinical phenomena are largely expressions of the efforts of nature to regain the normal. The practice of medicine and surgery, therefore, is the art of applying the sciences so as to aid nature to the highest degree.

In the above will be observed two keystones from which is constructed the double arch of the correlated curriculum—namely, (1) physiology and anatomy of the normal, and (2) physiology and anatomy of the abnormal; and these two are a unit—namely, “The Science of Man in Health and Disease.” The former is basic of the first two years and the latter of the third and fourth years of the correlated curriculum.

First, all knowledge is imparted in one of three ways; by repetition, association, or by logical conclusion. The correlated system makes the fullest possible use of each of these three methods. Second, medicine consists of a few massive subjects which are as suns around which revolve, with lesser orbits, the much smaller satellites or specialties. The correlated system focalises the students' attention upon great central luminous factors of medical knowledge and shows the proper sphere of the attending satellites, which but reflect the rays of the central truths. In other words, the student acquires a better knowledge of proportionate values and finds that the specialties do not teach so many new facts, but reflect in different ways the principles of certain basic subjects. Third, the practice of medicine treats of disease in various ways, the professor of practice giving definition, etiology, symptomatology, diagnosis, prognosis and treatment. In the correlated system the practice of medicine has each of these branches taught by a specialist who emphasises the minutia of the particular topic. The professor of practice, therefore, gives a connected outline of the subject, all the other chairs reiterate the outline and fill in the details.

HOW THE STUDENTS' WORK IS CORRELATED.

By the correlated system a different phase of the same general subject is taught each class simultaneously in the several depart-

ments of instruction. To illustrate, suppose the junior class is about to take up the gastrointestinal tract. The central studies as elsewhere are applied physiology and applied anatomy. Lecture courses are arranged beforehand in pathology, practice, surgery and every other subject pertaining to the region. All instruction is coördinated and made as nearly synchronous as possible. In other words, the symposium method is employed as completely as the subject matter will permit.

The correlated system of instruction as it is now employed in the Temple University Medical College has the hearty support of every member of the faculty. They find it helpful in the preparation and presentation of their subjects. They would choose no other plan. Students are much less apt to grow weary than under any other system. In fact they grow enthusiastic as the subjects unfold logically. No persons are louder and more emphatic in their praise of the correlated system than the graduates of the school. Moreover, the system has the hearty endorsement of medical teachers outside the college, who have personally inspected the work or inquired into the methods.

ADVANTAGES OF CORRELATED SYSTEMS.

To enumerate in detail the several particulars in which the new scheme has proven itself unquestionably superior to any and all the older schemes would unduly lengthen this article. Briefly, the following are some of the main features of merit in the correlated curriculum.

Students are taught naturally day after day to correlate their knowledge in taking up each new subject. As a most essential part of their training they early develop the power to correlate, which becomes to them a habit and a most valuable asset in their college work. The importance of this feature is not easily over-rated. Teachers feel its force in the greater ease with which students comprehend new and difficult subjects. Students from other medical schools are deeply impressed, by comparison, with the greater progress they can make by reason of this natural scientific procedure. The only knowledge a practising physician finds of value at the bedside and in his clinics is that which he is able to correlate, at the time, in its bearing upon the case in hand. Suppose he is consulted in a case of disease of the liver. He first uses his knowledge of the normal organ and its function (physiology and anatomy) to ascertain the location and nature of the morbid condition (pathology). He next recalls the local and general effects of perverted function (physical diagnosis) and thus, step by step, proceeds to methods of treatment (applied therapeutics). In other words, a physician must be able to correlate his knowledge of the medical sciences. The cor-

related curriculum takes cognisance of this fact. If the system had not a single additional point of merit this one alone would be enough to commend the scheme to the attention of every medical faculty in the world.

HOW THE CORRELATED SYSTEM SAVES TIME AND LABOR IN COLLEGE WORK.

The provisions of the correlated scheme make it not only easy but quite natural for each professor to present intelligibly every essential of his branch in its logical relationship to the remaining branches. Students come prepared to grasp the subject. The emphasis of subject falls where it belongs. There is the minimum of fruitless overlapping of minor facts for instructors and of worthless memorising for students. In short, the system effects a great saving of time and labor because based on common sense.

It is the only scheme that permits of reviewing the entire work of a given period within the allotted time. Not only is a complete review possible, it is at the same time also the most effective. The single aim of the Temple University Medical College is to prepare its undergraduates for the best work in the field of general medical practice, not for the Specialties. However, the experience of the time when the correlated curriculum was giving its best service, during the past five or six years, shows not only that our graduates are better fitted as general practitioners but also that they are better anatomists, better physiologists, better pathologists, better diagnosticians—in one word better doctors,—by reason of the correlated system of instruction.

Pneumopericardium—with Report of a Case¹

By JOSEPH BURKE, D. Sc., M. D.

Attending Surgeon, Emergency Hospital, Buffalo, N. Y.

THE presence of air in the pericardium is an occurrence of greatest rarity. Up to 1854, there were recorded but three authentic cases, those of Bricheteau, Stokes, and McDonald. Bamberger, as late as 1857, said that neither he nor Rokitansky (the greatest pathologist of his era), had ever seen a case of pneumopericardium. Schrötter, another famous Viennese physician, in his thirty-five years of earnest and intelligent observation of thousands of cases in the Vienna General Hospital, affirmed that neither he nor his venerated teacher Skoda, had ever seen a case; hence, I feel that the extraordinary rarity alone of this pathological condition and the fact that I have a personal clinical case to report, will serve as my apology for its introduction and discussion here this evening.

1. Read at Buffalo Academy of Medicine, April, 13, 1909.

ETIOLOGY.

The etiology of pneumopericardium is interesting; for, first, air can exist in the heart-sac spontaneously, as, for example, from the disintegration of a foul exudate, as in the case reported by Bricheteau; or, second, it can enter the pericardium from without the sac: (a) rupture of an air-containing abscess cavity, as in Graves's case of abscess of the liver which perforated the pylorus and pericardium; (b) communication of a tubercular vomica, or

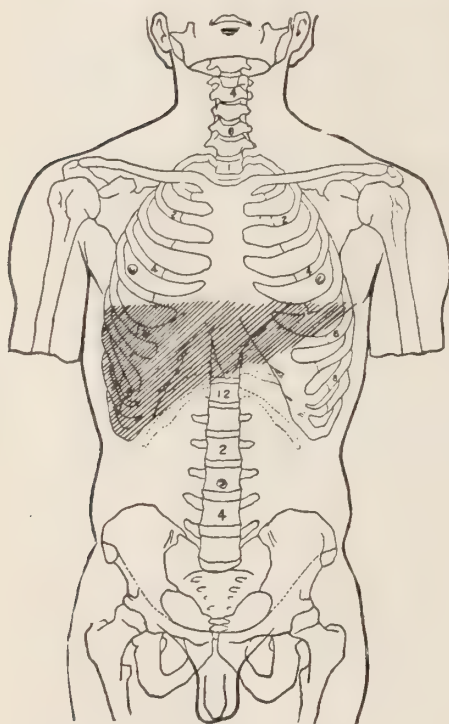


Fig. 1. Percussion dulness, lying on back.

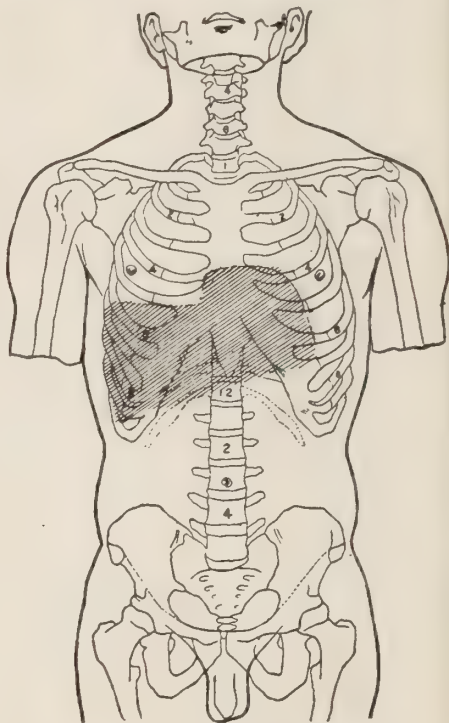


Fig. 2. Percussion dulness, sitting up.

of a pneumothorax, or ulcer of esophagus; (c) from external trauma, such as a stab wound and the like.

SYMPTOMATOLOGY.

From the standpoint of symptomatology, the condition seems to have excited a great deal more attention in the early days of physical diagnosis than we find in the textbooks or medical journals of the present generation. I presume this lack of interest from the clinical point of view is due to the rarity of the affection. However, in many textbooks in the early 50's, especially in that of Stokes in 1855, we find portrayed most vividly the ex-

traordinary physical signs that accompany it and are decidedly characteristic.

A painstaking review of the literature shows that in the cases reported, the physical phenomena were described so uniformly alike and were so remarkable, that in spite of the rare occurrence of the affection, its presence was very easily recognised. One must not forget however, that analogous to the behavior of pneumothorax, the pericardium can simultaneously contain not only air, but fluid as well, especially pus; therefore, one finds

physical signs, according to whether fluid is also present or not. Classically, there is to be found bulging of the precordia, due to paresis of the intercostal muscles, remarkably shown in our own case and which first directed our attention; there is absence of the apex beat and cardiac impulse, when the patient is in the recumbent position which, however, reappears when he assumes the upright or lateral position, or bends the chest forward. Since the air in the pericardium occupies the upper portion of the sac, the law of gravity here obtains; the heart and exudate sink to the

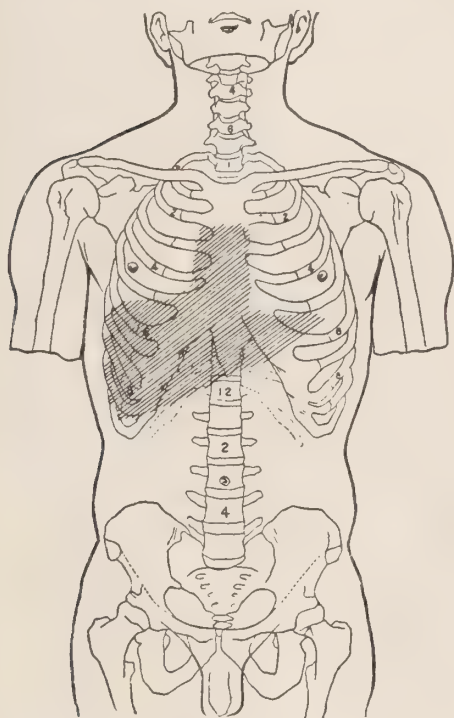


Fig. 3. Percussion dulness, lying on right side.

lower portion; the percussion phenomena become extraordinary. In the recumbent posture in place of the normal cardiac dulness, there appears a high pitched tympanitic note with accompanying metallic sound which, with diastole and systole, changes in character. As the patient changes from the horizontal to the upright position, the tympany gives place to normal cardiac dulness, and the apex beat reappears. In Walter James's case—I must say here that the clearest summary of the literature and most scientific exposition of the subject, pneumopericardium, was written by Dr. James in 1905—the study of the heart dulness in different positions of the body was

carefully observed and resulted as follows: "When the patient is lying on the back, there is pulmonary resonance with slightly tympanitic quality over the entire pericardium, as far down as the fifth costosternal junction, the line of dulness coming horizontally at this point. When the patient sits up, the percussion note from the third left space to the fifth rib becomes distinctly more dull; when lying on the right side, there is an area of dulness extending laterally from the right border of the sternum to a point half an inch to the left of the left border of the sternum, and longitudinally from the second interspace downward, until it merges into the liver dulness below."

I append herewith, figures 1, 2 and 3, illustrating Dr. James's case, and which are characteristic, taken from the *Medical Record*, June, 1905. The auscultatory phenomena are, according to Leube, more pregnant than percussion; the most important sign is the metallic character of the heart tones, which are so strong sometimes that they can be heard a distance away from the patient, if fluid be also present, there can be heard a peculiar succussion or splashing sound, which resembles the churning sound caused by a water wheel in motion.

In our own case the percussion findings were similar to those of Dr. Walter James's case, but the auscultation phenomena differed in this; that instead of succussion sounds there could be heard two dull, distant heart tones and a third dull, metallic sound, separated from these by a seeming interval; in other words, there could be heard three distinct tones, the first and second, dull and faint, the third characterised by a "metallic click;" there was no musical character to these sounds.

The functional signs that accompany pneumopericardium vary in different cases; in some there is dyspnea; in others, the difficulty in breathing is less. In our case there was neither cyanosis nor dyspnea; the patient acted as if there was nothing at all wrong with him.

DIFFERENTIAL DIAGNOSIS.

When one considers the above described individual physical signs of pneumopericardium, one cannot very easily confound this condition, if present, with any other; but, notwithstanding this, the following conditions may possibly be mistaken for it: dilated stomach, tubercular cavity and circumscribed pneumothorax. The one feature common to all of these conditions is the ability of the physician to determine the cardiac dulness and apex beat, when the patient is in the recumbent posture, readily determines the differential diagnosis.

J. F., male, 35 years, Italian. One Sunday, (April, 1908) about 4 P.M., while walking, patient was stabbed with a stiletto;

he walked to his home several blocks away, and only on account of profuse bleeding, did he call a doctor three hours later. Unable to check the hemorrhage, which was becoming alarming, the doctor had patient removed to the Emergency Hospital in the ambulance. Upon examination, I found a small wound $\frac{1}{4}$ inch long at the junction of the second rib and sternum, from which profuse bleeding was taking place, which afterwards proved to

be from the severed left internal mammary artery. Patient was in the easy recumbent posture; there was no cyanosis, no dyspnea though there was slight pallor. Inspection of chest revealed a very prominent, definitely circumscribed, bulging precordia, which corresponded to the classical area of relative cardiac dullness, increased one inch upward, one inch to right and left; there was, however, no perceptible apex beat, and no cardiac impulse could be felt.

(See Fig. 4). Percussion, patient recumbent, right chest. Normal resonance over whole lung anteriorly and posteriorly except from third rib downward, and from two fingers breadth, to right of

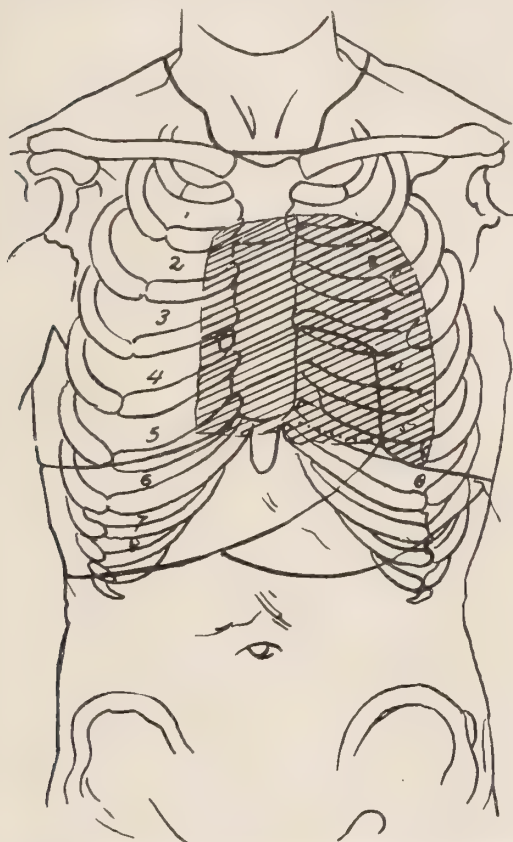


Fig. 4 Showing area of precordial bulging and tympany.

right border of sternum, where the normal resonance was replaced by a peculiar metallic tympany, which differed from the pulmonary resonance; also from the gastric tympany in the same individual.

Percussion, left chest; normal resonance to second rib, then loud tympany downward, replacing the usual area of cardiac dullness in parasternal and mammillary lines; in axillary line and posteriorly, normal resonance. When patient sits up and bends chest forward, the inspection and percussion findings change re-

markably; the apex beat reappears, the cardiac impulse reasserts itself. I am sorry I did not examine patient in lateral positions. I cannot therefore, give findings.

I have already described the auscultatory findings in our case, in the discussion of the affection generally, so will not repeat them here. In view of these findings, we could not mistake the diagnosis which we made preparatory to our surgical procedure, that of air in the pericardium.

The treatment in our case, consisted in resection of sternal portion of second rib, part of sternum, ligation of bleeding vessel, retraction of pleura. Number 1 catgut closed up the hole in pericardium.

There is one point I must dwell upon, and that is, when I had retracted the pleura and exposed the pericardium, there could be seen a small $\frac{1}{8}$ inch wound in the sac; and it could be observed that during every diastole of the heart, air bubbles would appear at the opening,—not unlike the familiar test of a leaking automobile tire-valve, showing the pressure of air within the pericardium. The patient made an uneventful recovery.

1012 MAIN STREET.

The Employment of Arsacetin (Ehrlich) in the Treatment of Syphilis¹

By A. NEISSER, M.D.

From the *Dermatological University Clinics, Breslau.*

(Translated for the BUFFALO MEDICAL JOURNAL.)

IN connection with my urgent recommendation of a new remedy, belonging to the series of arsenic preparations, for the treatment of syphilis, it should be pointed out at once that no substitution of mercury by a new curative agent is contemplated. On the contrary, after all the experience gained on man, in the course of the last decades, especially after the numerous animal experiments which are available, we have acquired the conviction not only, but the possible assurance, that mercury is a true remedy for syphilis; a remedy capable of removing the symptoms not only, but also of destroying the virus as such. It has been reliably established that at least the syphilis of monkeys can be entirely cured by suitable treatment with mercury.

If animals which have been treated with mercury in sufficient doses—this does not involve intolerable doses, injurious in themselves—are killed, and their organs are inoculated into other animals, these organs are found to be free from poison; whereas, they are almost invariably infected in untreated animals. If such animals are reinoculated, the procedure yields the positive result

1. Deutsche Medizinische Wochenschrift, No. 35, 1908.

of a second primary lesion; whereas, untreated animals cannot be reinoculated. Briefly stated, our experience serves to show us mercury more than ever in the light of an efficient weapon for syphilis, and work of the next few years will have to determine in what way our present methods should be modified, so as to take even greater advantage of the effect of mercury than heretofore. However, we are indebted to experimental investigation for our positive knowledge of the efficiency of mercury not alone, but of the knowledge that there exist still other true curative agents for syphilis than mercury.

Today I shall limit myself to the discussion of a new preparation which contains arsenic. By means of extensive animal experimentation, Uhlenhuth and his collaborators first pointed out the protective and curative action of atoxyl in experimental dourine as well as in chicken spirillosis. On the basis of this favorable experience, Uhlenhuth, Hoffmann, and Roscher next applied atoxyl in syphilis, experimentally in animals, and therapeutically in man, giving a report of their observations. Salmon (Paris) at about the same time experimented with the arsenic treatment of syphilis. Our investigations date back to the same time, and were carried out entirely independently of those of Uhlenhuth.

In recommending at the present day these arsenic preparations for the treatment of syphilis, I refer not to experience acquired upon the human subject, but on facts established in animal experimentation. Let the results obtained with therapeutic endeavors in the case of man be ever so favorable, we know through the century long employment of mercury, how little we are able to draw conclusions from the results obtained in man, concerning the true curative action of any remedy in regard to syphilis. It is only after several decades of therapeutic use upon a large number of cases, that anything definite can be reported concerning the true therapeutic efficiency of arsenic. By means of animal experiments on the other hand, Uhlenhuth, Metschnikoff and the writer, have all shown with absolute certainty that there are preparations in the arsenic series which are capable of entirely destroying the syphilitic virus in the body without harming the animal. But these preparations of organic arsenic are actually superior to mercury, for more especially monkeys do not tolerate mercury as readily as preparations of arsenic. The results established by Uhlenhuth and his collaborators, also by Metschnikoff, were confirmed and reported by us in various essays, upon a very abundant material, in an entirely free and independent manner.

The following brief reports are herewith summarised: with *acidum arsenicosum*, useful results could not be obtained, in spite of large doses. It was employed subcutaneously, in all kinds of

solutions, but so many disturbances occurred as the result of infiltration, such as abscess formation, and necrosis, that the carrying out of curative measures met with great difficulties. What was more serious, was the fact that it did not prove possible to guard infected animals in which treatment was begun a few days after the inoculation, against the onset of syphilis, or to cure animals which were at the time suffering from the disease. However, these experiments do not prove in any way that acidum arsenicosum is a remedy altogether unsuitable for the therapeutics of syphilis. Better results might possibly be obtained from its internal administration; for instance, experiments might be made to determine in which way it could be more readily tolerated by animals and this knowledge be used for a more continuous treatment. It might be combined with other arsenic containing preparations in a similar way as was for certain trypanosome diseases, by Laveran and Loeffler. Under certain conditions, there might accrue this advantage that each single one of the preparations be administered within readily tolerated doses, while the large dose required for a cure secured through the combination. These experiments will be discussed in detail on another occasion.

Sodium cacodylate proved entirely useless, even in very large doses. Atoxyl yielded altogether different results. I am unable to say in how far the preparation employed by us still suffers from the faults to which Hallopeau refers the unfavorable experience made with it in Germany. At any rate we are enabled to determine that the remedy, even in very large doses, was very readily tolerated by a large number of animals; and also to establish the preventive as well as the curative effect in a very considerable number of cases.

In our experiments for prevention the treatment was in part begun at once, in part the atoxyl injections not until the fifth to seventh day, in one case the thirteenth day, after the infection. The idea was to imitate the conditions as they obtain in every day practice, where a long series of days will pass before the possibility of a syphilitic infection is pointed out after a suspicious intercourse. Under a sufficient but entirely harmless dosage, by far the majority of the animals remained well, and in all these cases we convinced ourselves by a subsequent positive reinoculation, that the first inoculation had actually remained unsuccessful. An interpretation to the effect that the failure of the infection was referable to an imperfect inoculation was excluded by the large number of these experiments and by the proper control animals, which were left untreated.

Briefly stated, there can be no doubt but that atoxyl is entitled to consideration as to its preventive influence against syphi-

lis in monkeys. Later than seven days after the inoculation, experiments were made in but one instance. Those at present under way will be reported later on. Local injections (2 c.cm. of a 2½ per cent. solution) which were applied directly under the site of inoculation, proved unsuccessful. The same failure occurred also when salicylate of mercury injections were applied in this way. The curative effect of atoxyl was tested in all stages of the disease, and positively demonstrated. It was remarked that primary lesions occasionally healed very slowly, but at last there followed a complete cure, of the local affection not alone, but also of the general disease. A cure was obtained even in those cases where the animals had been infected many months previously. Thus the latent virus was likewise destroyed.

Besides the old "atoxyl," another new preparation made by P. Ehrlich, arsacetin, was utilised and tested upon a very large number of monkeys, during my sojourn in Batavia. This preparation owes its origin to the endeavor to obtain a less poisonous but equally efficient preparation as is atoxyl. A review of the literature shows that atoxyl has an equal number of friends and of opponents among those who have employed it in men. It is pretty generally admitted that atoxyl may exert a very useful effect in the treatment of syphilis, also causing the subsidence of symptoms. But it is stated, as a rule, that toward the primary and secondary symptoms, the remedy acts weakly, at any rate, weaker than mercury, and should therefore be restricted to the treatment of tertiary syphilis, especially of malignant forms, where it often renders excellent service; also, that it affords much less protection than mercury against the onset of relapses.

A number of writers endorse its use only in malignant syphilis and in those patients in whom the employment of mercury is interfered with originally, or permanently, by an idiosyncrasy. Still others reject atoxyl altogether, on account of the severe side effects which are unfortunately not so very rare. As a matter of fact, it can not be denied that if one had to reckon with the danger of optic nerve atrophy, after a merely moderate use of atoxyl, he would hardly decide upon the employment of such a dangerous remedy; at least not until the superiority of this new remedy, as compared to the tried and tested mercury, had been demonstrated for the bulk of syphilitic cases.

How about the actual dangers of atoxyl? From the very beginning of the atoxyl treatment, the French authors led by Hallopeau, pointed out that there must be a difference between the atoxyl preparations made and used in Germany and France. As a matter of fact, all the said cases of optic nerve atrophy, and of the other side effects upon the stomach and bowel, kidney, and the like, a very much greater number have been noted under

employment of the old German atoxyl, whereas the French preparation proved to be less poisonous. Hence, there either must have existed toxic side substances in the German atoxyl from the start, or they must have formed in it under improper preservation of the solution. This idea suggests itself even more because atoxyl solutions have long been known to decompose easily, to change in color (turn yellow), and to become a possible source of danger because they can not be simply sterilised by boiling, for the reason that boiling leads to chemical changes.

It is only very recently, as far as I am informed, that the mode of manufacture has been changed in Germany, so that at present an absolutely pure crystallised preparation is put upon the market. It is to be hoped that in consequence, and also through caution with the dosage, the serious side effects of the past will not be repeated. Doses of 6.0 to 6.5 grms. (90 to 97½ grains) had been stated, especially by Lesser, as the maximum for a total treatment. Robert Koch, on his expedition, showed that infinitely larger amounts of atoxyl may be employed. Blindness did not occur when he employed atoxyl in doses of 0.5 gm. (7½ grains) each, twice weekly, for months together, but it is true that individual doses of 1.0 gm. (15 grains) did induce blindness.

Accordingly, we were confronted on the one hand with the fact, as crystallised by animal experimentation, that atoxyl is a curative agent against syphilis, when the treatment is liberal enough; on the other hand, it had to be admitted that the dose required to reach this goal might not prove beyond objection in man, so that a thorough atoxyl treatment would meet with considerable difficulties, on account of the poisonous properties of the preparation.

In this state of affairs, Ehrlich recommended a new atoxyl preparation. In the first place, he showed that the former chemical interpretation of atoxyl as a "meta arsenate anilid" was an erroneous one. He proved together with Berthelm, that atoxyl has an entirely different constitution, and that it is the mono-sodium-salt of p-amino-phenyl-arsenate. From this fundamental substance, the acetyl compound is prepared, the sodium salt of which represents sodium acetylparamidophenylarsenate, for which the abbreviation "Arsacetin" will be used in what follows. In contradistinction to the parent substance, the solutions of arsacetin are extremely stable towards high temperatures and may even be heated in the autoclave to 130° C. without undergoing the splitting off of arsenic acid. I have been working with this arsacetin for many months in Batavia, and have established the following conclusions:

1. The preparation is certainly less poisonous than old

atoxyl, always keeping in mind, of course, that 0.6 gm. (9 grains) of the new preparation equal 0.5 gm. ($7\frac{1}{2}$ grains) of the old. Healthy as well as diseased animals tolerated very much larger doses of arsacetin than of atoxyl.

2. The curative effect upon syphilis was at least equal to that of the old preparation. I even believe the curative action to be greater than with old atoxyl, as far as this is demonstrable.

3. No decomposition of any kind could be demonstrated in the solutions themselves, after they had been kept for a long time, especially was there no yellow discoloration. Also in animals, there appears no difference in the toxic effect of very old, or of newly prepared solutions; the solution was not even changed in any way by daily boiling.

Corresponding to these experiences made on animals, our syphilitic patients have been treated for the better part for several months with this new arsacetin, which I feel able to recommend as a very useful preparation. Regarding its therapeutic efficiency, similar statements must be made as those applied above to atoxyl. In very numerous cases, it promptly removes existing symptoms, in others it fails. Relapses are not prevented, and even appear in the course of the treatment. Concerning the control of the symptoms, it is inferior to mercury. But I must insist once again that the attitude of judging the efficiency of an anti-syphilitic agent by its symptomatic curative action, appears to me an entirely erroneous one, when proof has already been furnished, in animal experimentation, that the remedy possesses a positive, curative, virus destroying action.

I consider it our duty to utilise these experiences gained on animals for the treatment of human syphilitics. If at present we are unable to prove positively that human syphilis is cured more rapidly and reliably by these new preparations than heretofore, on the other hand no one is justified in doubting it. I would regard it as wrong, however, to limit the treatment to these atoxyl preparations and to abandon the positively tested effect of mercury. Meanwhile, there is no necessity at all to decide in favor of one or the other remedy, as the two may be employed side by side. This can be done so much more readily as it has been shown, in many trypanosome diseases not only but also by ourselves in case of syphilis, that combinations of mercury with the new arsenic preparations render excellent services. It seems as if one might really remain within smaller limits of dosage for each remedy, when the two are combined,—meaning limits such as must be designated as entirely harmless,—unless there exists an idiosyncrasy, without diminishing the therapeutic effect.

Concerning the side effects of arsacetin, we have not observed a single instance of optic nerve atrophy or a similar damage to

the nervous system, although we can look back upon a large number of treatments. Neither have disturbances of the kidney been noted. More frequently, but far more rarely than under employment of atoxyl, we observed temporary pains in the stomach and bowel, which in very rare cases increased to vomiting. It was a noteworthy fact that the vast majority of these disturbances occurred in women; in men, they were positively exceptional. Recently these disturbances have been controlled with apparent success by the administration of *magnesia usta*, and they have been guarded against by giving a small teaspoonful of the *magnesia* shortly before the injection and again four or five hours after it. Other alkaline salts seem to act in a similar manner, at least one of my patients who was taking the Karlsbad cure, found that the injections which otherwise caused a certain amount of distress in his stomach and bowels agreed with him much better while he was using the alkaline waters.

Sudden elevations of temperature, rapidly subsiding again, were noted a few times, without being associated with other signs of intoxication. In a general way, it may be said that in the vast majority of the cases, there occurred no disturbances at all, and when this was the case, they were but insignificant. Nevertheless, it is advisable, for the present at least, to observe certain precautions when making use of this treatment, by giving in every case a small initial dose to start with, 5 to 10 cgrm., and by not treating all syphilitics unconditionally with *arsacetin*, but only those in whom no parenchymatous organic disturbances can be demonstrated. Although the innumerable animal experiments which have already been performed with *arsacetin*, have shown that the toxicity—more particularly that referable to arsenic—is relatively very slight, and that perfectly enormous doses (as calculated for man) are required to produce a fatal outcome, or degenerative organic changes; and although *arsacetin* is readily tolerated by individuals with healthy organs, it would seem as if diseased or weakened organs are more susceptible to the toxic influence. Individuals, for instance, who are suffering from myocarditis, are preferably not subjected to this mode of treatment at all.

In nephritic individuals, the same procedure is indicated as in treatment with mercury. In the first place, the exact condition of the patient must be determined by a prolonged period of observations, as to the degree of the albuminuria, the kind and number of cylinders, cells, and the like. Then the tolerance of the preparation by the kidneys must be carefully studied by the administration of small daily doses. It will be found that no aggravation of the kidney trouble, in any direction whatsoever, occurs in a very large number of cases. Concerning the mercury cures, I can positively assert that a very essential improvement

is obtained in many cases, perhaps allowing the conclusion that the renal affection in these cases was caused by syphilis.

Patients having tabes, paralysis, severe neurasthenia, and the like, occasionally present attacks of vertigo or aggravation of the nervous symptoms, and the treatment was therefore invariably interrupted in these cases as soon as such disturbances became manifest. Waterman a year ago recommended in case of atoxyl that it be omitted in syphilis of the brain as well as in tabetic atrophy of the optic nerve, especially as he was unable to obtain favorable results in the treatment of central affections of the optic nerve on a syphilitic basis. But in this connection, we may rightfully inquire — (I here accept an opinion expressed by O. Foerster)—if it is not precisely the aggravation of the symptoms in tabetics, for instance, which indicates that an action of the remedy upon the pathological foci exists, and that the treatment should therefore be kept in those cases in which certain nervous symptoms are increased during the treatment, perhaps through the treatment. It is probably correct, however, as I believe in conformity with Ehrlich—to diminish the doses in these cases, to such a degree that the reactions are reduced to a slight measure of severity.

Our treatments were carried out in the following manner: based upon the experience of Robert Koch, I injected 0.6 gm. (9 grains), arsacetin (0.5 gm. atoxyl ($7\frac{1}{2}$ grains), on two successive days of each week. We have injected occasionally 0.75 gm. (12 grains), and reduced the five days' interval between the two injection days to four days in certain instances.

It cannot yet be decided whether or not it is absolutely necessary to administer the injections on two successive days, or if the same result is obtained by injecting regularly, every fourth day, for instance. In analogy with the experience gained in trypanosome infections, it would seem advisable for the time being to give as large doses as possible, in a short space of time, rather than at longer intervals. Such injections of 0.6 up to 0.75 gm. (9 to 12 grains), were not carried out by me for a longer time than ten weeks, equalling a consumption of 12.0 to 14.0 gm. (180 to 210 grains) pro treatment; invariably, I wish to repeat, without any serious side effects.

The preparation was employed in either a 10 or 15 per cent. solution. The latter affords the advantage that it is not necessary to inject very large quantities of fluid. The transitory pain at the site of the injection is thus still more diminished. But there is this drawback that in the 15 per cent. solutions, the salt is precipitated by cold, so that the fluid must be treated before each injection.

Infiltrations or abscesses were not observed in a single in

stance, for the solutions are easily sterilised by repeated boiling. In the majority of the cases, a combination of mercury with arsacetin was made use of for the time being. Either inunction cures were prescribed (for patients in the clinics, or those leading a very domestic life), or injections were made with the new gray oil, or a calomel ointment 40 per cent. These two preparations I am able to recommend very strongly as producing far slighter symptoms of irritation than our old preparations. However, a very special manufacture is required, such as is guaranteed pure.

The mercury and arsacetin treatments were carried out together in the past. Perhaps they might be applied alternately also. Neither is there apparently any objection to the internal administration of arsacetin. For the time being, I have not exceeded the dose of 0.12 grm. (2 grains) daily and therefore am unable to say up to what doses we may go in the internal administration of the remedy. Again, the question arises if the daily administration of relatively small amounts is really just as efficient as single very large doses. I am at present engaged upon animal experiments, for the elucidation of this point.

The combination of various arsenic preparations, notably atoxyl and acidum arsenicosum, recommended by Loeffler has been already pointed out above. The objection to the effect that this constitutes merely the simultaneous employment of two arsenic preparations, must be refuted from the start. Ehrlich's investigations have rendered it probable that under employment of atoxyl, or arsacetin, the destruction of the parasites is referable in the first place to the products originating through reduction, the arsen-oxyd and arsen substances; whereas, a secondary part is played by the constituents liberated by splitting,—anilin and inorganic arsenic acid,—provided these play any part at all.

It was also shown by Ehrlich through his experiments upon trypanosomes rendered immune to the toxin, that different preparations, although they all contain arsenic, may unfold entirely distinct therapeutic activities. A trypanosome culture which is immune against an arsenic containing preparation A, is not immune against an arsenic preparation B, which is apparently very closely related to preparation A.

Whether it will be possible to transfer at once to human therapeutics the combinations recommended by Loeffler, Laveran, and others—is still a matter of speculation. It is true that in animals, very favorable results have been obtained by the combination of arsenic acid with atoxyl, but in these cases the doses were such as cannot be employed in man, with the figures as calculated for the human subject. Especial attention is called to the following fact: the side effects observed in man are due to impure atoxyl, having contained arsenic acid; and since it must be assumed that

the amounts of arsenic were relatively inconsiderable, but nevertheless sufficient to cause the injurious side effect, it results that in the case of the human subject, inorganic arsenic acid must be regarded as an especially dangerous substance, in certain individuals. Meanwhile, it is presumably a fact that arsenic acid, administered internally, is transformed in part into arsenious acid, which acts much more strongly in man; hence, it is to be feared that by combining the pure atoxyl preparations with arsenic acid or arsenious acid, those dangers are encountered which were to be avoided by the purification of the preparations. (Compare Ehrlich).

Prolonged research in this connection, is evidently required before all these points can be determined. This labor will necessarily fall to the lot of scientific institutions and experimental investigations. Again it must be repeated that in the case of a chronic disease such as syphilis, the experiences and observations made on the patients, favorable as well as unfavorable, do not at once permit a conclusion as to the actual value of any remedy or method. In the treatment of patients all that can be established for the time being is the effect upon the symptoms, whereas, nothing at all can be stated concerning the actual eradication of the disease.

However, as we are not in any way justified in doubting this possibility of obtaining the actual eradication of the disease, in the case of man, and this more rapidly and reliably when the new preparation is utilised besides the good old remedy, mercury—it becomes our duty, I am convinced to take advantage of this possibility. It should not be forgotten what prolonged labors and constantly renewed modifications were required until we had learned to recognise in full the curative action of mercury and to utilise all its therapeutic power.

When all is said and done, arsacetin is merely the first step on the road toward new and improved antisyphilitic agents. At the Frankfurt Congress of the German Dermatological Society, the principles for the continuation of these investigations were extensively discussed by Ehrlich, who also reported at the same time certain reduction products of other organic arsenic preparation, which were of extraordinary efficiency against trypanosomes in animal experiments and proved vastly superior to arsacetin and atoxyl. Ehrlich concluded his address by saying that even if this substance should prove in the end to be unsuitable for man, we must not allow ourselves to give up and abandon all hope in the search for improved remedies. We must simply keep on along the path which is now clearly outlined for us. As a matter of fact, I have no doubt whatsoever, but that this goal, already reached by Ehrlich in the treatment of dourine, will also be attained by us in the treatment of syphilis.

The Treatment of Acute Gonococcic Urethritis in the Male¹

By JAMES PEDERSEN, M. D., New York.

Adjunct Professor of Genitourinary Surgery, New York Post-graduate Medical School and Hospital.

(*New York Medical Journal*, January 23, 1909.)

UNDER the steady pressure of the pen in the hands of those who, having given the subject much study and thought, have pleaded earnestly for a serious comprehension of a serious disease, the profession at large is at last yielding to the conviction that the long lived, subtle gonococcus is by far a more potent depopulator than the insidious cause of syphilis. That gonococcic urethritis is the greater menace to the body politic is becoming an universally admitted fact. The popular impression of the relative character of the two diseases has been revolutionised. No better summary of the facts need be given than that deduced by the late R. W. Taylor. Speaking through the pages of his still living book he says: "When we consider the vast range of pathological conditions which gonorrhea may cause or lead to, we are certainly warranted in asserting that it is, taken as a whole, one of the most formidable and far reaching infections by which the human race is attacked."

When the cause of a disease can be attacked and the method of its conveyance can be governed, the treatment of that disease has acquired not only a certain definiteness, but also a great importance, it having risen to the dignity of a preventive measure as well. The prevention of disease is the sublimest function of medicine. The cause of gonococcic urethritis is known and can be attacked; the method of its conveyance can be governed—at least to a great extent. Therefore, as physicians ever laboring for the physical, mental, and moral welfare of the race, it behooves us to arrest the progress and ravages of gonococcic urethritis, knowing well that thorough treatment of each individual case works for the prevention of this all too prevalent disease. This is our duty for the sake of the family and the state.

Let me open the subject proper of my lecture with the oft heard question: "What is the best treatment for gonorrhea?"—meaning gonococcic urethritis. I would reply by saying that no one of the advocated methods implied in the question can be named alone—much less heralded alone as the "best" treatment. I would make a point of this and emphasize it by adding, that no one method or set of means is applicable to every case of gonococcic urethritis. The "best" treatment, therefore, may be defined as that which consists of a rational application of all the

1. Read by invitation before the Scranton (Pa.) Clinical and Pathological Society

advocated or admissible methods and means for combating this very serious disease, and their intelligent adaptation to the patient in hand. The "best" treatment is a *composite* treatment. If I may be allowed to quote from one of my previous papers, I shall briefly describe the several methods and their means, which may be said to form the component parts of the composite treatment. That done, I shall endeavor to apply them to the indications based on the present day knowledge of the biology and pathological anatomy of the disease. The several methods implied in the question may be classified as: 1, The expectant method; 2, the modified expectant method; 3, the hand injection method; 4, the irrigation method.

1. The expectant method places the patient under the best possible conditions for allowing the disease to run its normal course of from five to six weeks. The means are: absolute rest in bed, milk or milk and vichy diet, from one to two quarts of plain or mildly alkaline water a day, mild laxatives, rigid regulation of alcoholic beverages, tobacco, and coffee. The conventionalities of life, the average patient's uncompromising protest against having his business interrupted, not to mention the existence of a more scientific method for treating the disease, make this method as such an impossibility and a deficient method today. Its means, however, are rational means, and comprise all the essentials of the *general* treatment applicable to every case, as opposed to the purely *local* treatment. It quiets the circulation throughout the body; it puts the urethra at rest as far as possible, consistent with its function as a urinary canal; it maintains the urine in a bland state and supplies it in quantities sufficient to produce a frequent flushing of the urethra by physiological means without the possibility of traumatism—unless a stricture of small calibre is present as a complication.

2. The modified expectant method adds the administration of drugs for one or more of three purposes: (1) To influence the volume and reaction of the urine; (2) to render the urine more or less antiseptic; (3) to charge the urine with a medication in solution which shall act upon the inflamed muco-membrane. For the first purpose there are the demulcents, the alkalies, sodium benzoate, sodium salicylate, salol, and saccharine. For the second purpose there are the several urinary antiseptics, of which urotropin, cystogen, lysidin, uriseptin, and helmitol serve as examples. For the third purpose, the balsams, of which copaiba, sandalwood, and cubebs remain the essential ones. Plain water in quantity is the best diluent. As to whether the reaction of the urine should be made alkaline or kept acid, there is a difference of opinion. Some authorities maintain that the alkalinity of the urine distinctly inhibits the growth of the

gonococcus in the urethra, while others contend that the acidity of the urine prevents the gonococcus from invading the wall of the bladder. If the former view is accepted and alkalies are given, the tendency to ardor urinæ will be lessened, if not prevented, as an additional effect; if the latter view is accepted and the newer acidifying drugs are given (called the modern urinary antiseptics, of which urotropin is the type), the presence in the urine of the potent antiseptic, formalin, will be obtained as an additional advantage. As there exist, however, far more direct and conclusive means for not only inhibiting the gonococcus in its first culture chamber—the anterior urethra—but also for destroying it there, the feebly effective alkalies on the one hand, and the scarcely less feebly effective acidifying and formalin liberating drugs on the other, are not necessarily demanded. As the gonococcus invades by continuity of tissue through the intracellular spaces and lymphatics, medicaments that do not penetrate below the surface can have but a negative value. Any prevention of invasion of the bladder, attributed to the presence in it of acid urine containing formalin, has been more apparent than real; the gonococcus, even under favoring conditions, very rarely invades the bladder mucosa beyond the trigone. The drugs under immediate consideration may, therefore, be withheld until ardor urinæ develops and furnishes a positive indication for the alkalies, with or without a demulcent or a balsam. Even this indication can usually be met by the milk and vichy diet. Thus the patient's stomach may be spared considerable medication.

The balsam (sandalwood, copaiba, and cubebs) certainly render the urine less irritating, and, in spite of their stimulating effect upon the urethral mucous membrane (as indeed upon all mucous membranes) they contribute materially to the patient's comfort when ardor urinæ exists, even during the acutest stages of an acute urethritis, in all stages of which they are contra-indicated theoretically. This happy effect is especially noticeable in acute posterior urethritis, from the mild up to the fairly severe grade; they promptly lessen the frequency and diminish the tenesmus to the great relief of the sufferer. But, because the balsams usually check the discharge (the symptom) without attacking the gonococcus (the cause), thus handicapping Nature's effort to rid the urethral tissues of the offending microorganism and misleading the patient into thinking he is already cured of what he is only too willing to regard as a trivial disease; because they tend to disorder the digestion, and, in full dose, to produce renal hyperemia, they should be withheld until needed as *adjuncts* in ardor urinæ or as *principals* in acute posterior urethritis.

3. The hand injection method brings prominently forward the present day medicinal means for directly attacking the gono-

coccus at the site of its invasion and development. Those means are the various silver albuminoid compounds, such as argonin, protargol, albargin, argyrol, and novargon. They represent the nearest approach yet made to specifics in gonococcic inflammation of the mucous membranes. That they exhibit so destructive an activity toward the gonococcus as to deserve the credit of having an affinity for it, and that they accomplish this destruction without, as yet, any appreciable damage to the mucous membrane, has been proved clinically to the satisfaction of many observers. They seem to fulfill Neisser's specifications for an ideal antibacterial agent for use in the urethra. As quoted by Finger, those specifications are: (1) it must kill the gonococcus; (2) it must not injure the mucous membrane; and (3) it must not increase the inflammation.

My personal experience with the silver albuminoid compounds has been confined to argonin, protargol, and argyrol. Following their use I have noted the disappearance of the gonococci and the subsidence of the discharge within from twenty-four hours to fourteen days, with few exceptions. When such an exception occurs, one or more conditions may be suspected and should be searched for as soon as possible or permissible: (1) a preëxisting focus of latent gonococci, such as a chronic vesiculitis, prostatitis, or Cowperitis affords; (2) oxaluria, or urine loaded with uric acid; (3) glycosuria; (4) tuberculosis as such or the diathesis.

The disappearance of the gonococci and the subsidence of the discharge within the first forty-eight hours—not an infrequent occurrence especially when the patient is seen in the very incipency of the urethritis—is practically an abortion of the disease. A paragraph on this interesting and much desired effect is, therefore, appropriate at this point.

When silver nitrate was the only available means for this purpose, the fact was well recognised that any attempt to abort the disease was futile unless made at the very earliest stage. The discharge consists then only of a little serum and mucus, floating epithelium, and a very few pus cells, together with a few gonococci lying free or upon the epithelium. Relatively few patients were seen so early in the disease, therefore cases of true abortion were rare. Much more frequently the results amounted to an inhibition of the disease, and the end results were not always of the best, inasmuch as the cauterising effect of the silver nitrate solution (from 1 to 5 per cent.) used in the attempts, often left the patient with a deeply damaged mucous membrane, eventuating in stricture. These experiences led conservative genito-urinary surgeons to abandon attempts to abort the disease. Now, however, with the present potent but practically noncaustic sil-

ver albuminoid compounds, there exists the certainty of better results without the danger of subsequent stricture. In my experience with these compounds in solutions of suitable strength, the injection of two drachms into the interior urethra and their retention there for from five to ten minutes in the incipient stage, or stage of invasion, of a gonococcic infection of the urethra, will abort the acute stage of the disease and materially shorten its subsequent course, unless there is present a complicating sequel of an antecedent urethritis.

Convinced of the affinity of these compounds for the gonococcus, and admitting that they seem to possess the power of penetrating the mucous membrane and of attacking the gonococcus there, as well as on the surface, without damage to the mucous membrane, the direct, immediate, and prompt application of some one of them and its retention in contact with the urethral mucous membrane for from five to ten minutes as soon as gonococci have been demonstrated, appeals to me as a most rational method of treatment. It stands to reason that the more promptly the gonococcus is destroyed the fewer will be the complications and the "pathological conditions which it may cause." As a consequence, the shorter will be the course of the disease. The argument holds good, even though no more than an inhibition of the gonococcus is admitted as the maximum effect of this treatment. Not only is the method rational, but also very practical, when carried out by means of a hand syringe which the patient can use himself as frequently as directed. This entails a minimum of discomfort and loss of time. After having been taught how to apply the blunt tip of the hand syringe against the meatus to avoid leakage, and how to inject slowly and gently, the only accident he has to guard against is a staining of his clothing when releasing the solution from the urethra.

Another means of using these solutions is the familiar irrigator. To use it properly is an art that few patients can acquire within the time limit of its greatest utility. It is not possible for every patient to learn how to irrigate his anterior urethra without subjecting it to the traumatism of overdistention, nor how to avoid an inadvertent intravesical irrigation. The former causes pain; the latter exposes him to urethrocystitis and epididymitis. Taking another point of view, it is not easy to understand how the average patient can be taught to manage a quart of solution as conveniently, as expeditiously, and as effectively as he can a quarter of an ounce of a stronger and therefore more efficacious solution.

4. The irrigation method, that is, the copious flushing from the meatus of the anterior urethra alone or of the whole urethra with a warm solution of some medicament, has superseded and

is an improvement upon the older retrograde irrigation by means of the various soft rubber and metal catheters and bulbous tipped irrigating instruments introduced into the urethra. There are today only two indications that justify instrumentation of an acutely inflamed urethra: (1) retention of urine, not yielding to all the lesser means for its relief, (2) extremely severe posterior urethritis—to which a definite reference will be made later. The means of applying the irrigations are a six ounce hand syringe with shield and adjustable tip, or a suitable glass nozzle and shield at the end of the tubing from an irrigator jar. By its advocates, the irrigation method is credited with results equal to those of the hand injection method. To my mind, however, the method is not as rational unless the medicament used be a silver albuminoid compound in weak solution, and unless the irrigation be given so gently and skilfully as not to subject the sensitive, acutely inflamed urethra to the additional traumatism of overdistention, nor force the fluid past the sphincter into the bladder. The intentional carrying out of intravesical irrigations during acute urethritis is irrational and unwarranted. They cannot but lead to hyperemia of the mucous membrane of the deep urethra. This in turn invites infection. The dangers, as already mentioned, are, urethrocystitis and epididymitis. The main utility of this method lies in the effect that moist heat has upon any inflammation. Hence, irrigations of the anterior urethra in conjunction with hand injections of one of the silver albuminoid compounds are to be employed in those neglected cases in which the inflammatory symptoms have become paramount, as shown by a red and edematous condition of the meatus, and a copious greenish yellow discharge. The irrigations should be discontinued as soon as these signs have disappeared.

It is a subject for regret and criticism that the irrigation method, or the irrigation treatment, as it is popularly known, should have been revived at the time when argonin, the first of the silver albuminoid compounds, was offered as a potent and supplanting substitute for the long list of sedative, antiseptic, and astringent injections, which for years had proved unsatisfactory and disappointing. It was this very disappointment, long continued and oft repeated, that had made the profession receptive of, in fact, eager for any change, the more radical the better, that bore a hint of promise in it. In spite of the fact that irrigation had been tried many years before and found wanting—so many years before that its negative results had been lost sight of—the “treatment” was resurrected and vaunted with the enthusiasm of originality. The sober judgment of the profession at large, taken unawares, was swept away. Attention was diverted from the truly potent and convenient argonin, and it

was some time before its value was noticed by the general practitioner. Gradually, however, the results obtained with argonin became obvious. An item of great practical value from the view point of the patient is the fact that the hand injection method, as opposed to the irrigation method, does not oblige him to visit his physician from once to twice daily during the acute stage, nor to provide himself with specialised apparatus for use at home after preliminary instruction.

Such, in more or less detail, are the four applicable methods for the treatment of gonococcic urethritis. Before applying them to the several indications and molding them into what I have called a composite treatment, it will be in order to refer to the indications, based on the biology and pathology of the disease as understood today. What is gonococcic urethritis? It is a purulent inflammation of a delicate, highly sensitised mucous membrane, caused by a virulent, penetrating, long lived micro-organism. The inflammation inflicts more or less damage upon one or more of the layers composing that mucous membrane and tends to chronicity. It follows, therefore, that the indications for treatment are: (1) the destruction of the gonococcus without increasing the damage done or being done to the mucous membrane; (2) the termination of the inflammatory process excited by and left behind by the gonococcus; (3) the repair of the damaged mucous membrane.

(1) *The destruction of the gonococcus without increasing the damage done or being done to the mucous membrane.* That the silver albuminoid compounds, in solutions not strong enough to cause any appreciable damage to the urethral mucous membrane, exert a potently destructive action on the gonococcus, cannot be denied. The clinical evidence is overwhelming. In a way that is unique they fulfill those requirements named by Neisser already quoted. They do kill the gonococcus, they do not injure the mucous membrane, they do not increase the inflammation. Therefore, they are employed as injections into the anterior urethra and are retained there for from five to ten minutes if the discharge contain gonococci. The same is done as a prophylactic measure if the history is at all suspicious, even though the microscopical examination, made on the instant, be negative. The patient is then taught how to use the injection for himself every three hours for the first twenty-four hours and every four hours thereafter. Every fourth day he reports for inspection, and each time a smear is examined. As the gonococci diminish in number, the strength of the injection is reduced, and the frequency of its use is gradually changed from four times daily to twice daily. After the gonococci have been absent for from three to seven days (depending upon the severity of the infection in the

given patient), the injection is reduced to once a day. From five to ten days later (again depending upon the patient) it is discontinued altogether.

If the inflammatory signs of the disease are excessive at the outset or if they become so at any time during the course of this, the acute stage, the patient is provided with a tablet of bichloride of mercury one of which in eight ounces of water makes a solution of one in thirty thousand. He is to make a solution of that strength, using hot water, and with his one quarter ounce hand syringe he is to gently flush the anterior urethra six or eight times before each use of the silver albuminoid solution. If necessary, an additional and more copious irrigation is given daily or every other day by the physician.

(2) *The termination of the inflammatory process excited by and left behind by the gonococcus.* Almost any one of the mineral or vegetable astringents will meet this indication, provided strong solutions are avoided. The mineral astringents seem to have the preference. Zinc sulphate may be used up to gr. 2 in $\bar{3}\bar{i}$. Zinc sulphocarbonate up to gr. 5 in $\bar{3}\bar{i}$. Zinc iodide and zinc chloride, each, up to gr. $\frac{1}{2}$ in $\bar{3}\bar{i}$. The astringent injection is used twice daily—rarely three times daily, at first. This frequency is gradually reduced as the catarrhal discharge diminishes, and when it has totally or practically disappeared, as shown by the presence of a mucoid morning drop at most, the injection in use is discontinued. If the catarrhal discharge persists longer than two weeks in a case of average severity, some complication—either antecedent or recent—is to be sought. Microscopical examinations of the catarrhal discharge are made regularly throughout this, the subacute stage, and if gonococci reappear, the silver albuminoid injection is at once resumed. The restrictions as to diet, alcohol, tobacco, coffee, and sexual excitement, both active and passive, are not abated; but a little more exercise is allowed.

(3) *The repair of the damaged mucous membrane.* Silver nitrate in solution is by far the best agent for this purpose, because the safest and most efficient. In solutions of from 1 to 5,000 to 1 in 250 it is brought into contact with the mucous membrane by means of the Ultzman syringe or (better) the Bangs's syringe sound. In solutions of from gr. 5 in $\bar{3}\bar{i}$ up to gr. 10 in $\bar{3}\bar{i}$, it is applied by means of a cotton swab through the endoscope. Stronger than gr. 10 in $\bar{3}\bar{i}$ (2 per cent.) is not advised. Every instrumentation should be carried out gently, and no form of instrumentation employed for this indication should be repeated oftener than once in five days. Once in seven days is often a safer average. The lubricant used should be soluble in water. Experience alone will teach when the treatment of this, the chronic stage, may be begun. Speaking generally, if the case

has been one of mild infection and the previous history is negative as to stricture the instrumental treatment may be delayed. If the contrary has obtained, especially if there is reason to suspect stricture—antecedent or recent—the treatment may be begun earlier—even before the morning drop has disappeared. Indeed, without judicious instrumentation—not repeated oftener than every five days—the catarrhal discharge will persist indefinitely in some cases. In such cases, as in all obstinate cases, prostatitis and seminal vesiculitis should be examined for.

When the morning drop persists in consequence of an unusual involvement of the urethral follicles (follicular urethritis) the irrigation method is of service as an adjuvant. The irrigations should be given to both the anterior and posterior portions of the urethra. This is now permissible, the chronic stage having been present for perhaps two to three weeks. The irrigating fluid, flowing from the meatus backward into the bladder, enters the follicles—their mouths being directed forward—and removes their retained secretions. The solution may be one to thirty thousand bichloride, full strength boric acid, 1 in 2,000 potassium permanganate of 1 per cent. (or less) of one of the silver albuminoid compounds.

For the sake of clearness, the treatment of *acute posterior urethritis* has not been mentioned thus far. It occurs in 90 per cent. of all cases of anterior urethritis and develops early in the course—on or about the eleventh day. The majority of cases give no symptoms. This fact should be kept in mind that the treatment of the posterior urethra is not overlooked or omitted while the treatment of the anterior urethra is being carried out during the chronic stage, for the repair of the damaged mucous membrane. A fair number of cases give, as symptoms of the acute invasion, more or less frequency alone, or frequency plus urgency, or frequency, urgency, and tenesmus.

As long as the tenesmus is not severe, what has been called the modified expectant treatment will be found sufficient. The patient should go to bed, his diet should be confined to milk and vichy, the alkalies or a balsam should be subscribed, and a saline laxative given if necessary. When the tenesmus has become unbearable and is uncontrollable by the other means, one of the two indications for instrumentation of an acutely inflamed urethra has arisen. The anterior urethra having been gently irrigated with warm boric solution, and anesthetised with a 2 per cent. solution of eucain, a soft rubber catheter, in size from 14 to 16 French, is passed and the deep urethra is gently flushed with two or three drachms of a silver albuminoid solution, or a solution of silver nitrate, in strength from 1 to 5,000 to 1 in 1,000. The relief is often surprisingly great and prompt. One such

installation, or flushing, may prove sufficient to finally relieve the patient of his distressing symptoms. If, however, they recur—as they may after a day or two in cases of severe infection—the installation may be repeated. At the same time the possibility of a complicating acute prostatitis should be considered, and a prostatic abscess, as the cause of a frequent recurrence of the symptoms in spite of careful treatment, should not be overlooked.

20 EAST FORTY-SIXTH STREET.

CLINICAL REPORTS.

Clinic—Buffalo Hospital Sisters of Charity

L. G. HANLEY, M. D.,

REPORTED BY

JOHN STOWE, M. D., Interne.

EXTRAUTERINE PREGNANCY—OBSTRUCTION OF BOWEL—A RUPTURE OF SAC.

CASE I.—February 2, 1909, Mrs. B., age 34; number of children, 4; no miscarriages; youngest child one year old, has had no sickness. Has always been regular with her menstrual periods till November 1, 1908, when she had menorrhagia, which lasted about three weeks. Menstruated December 20, 1908. Says she has been failing since October. Was admitted to hospital February 2, 1909, suffering from obstruction of the bowel. There had been no movement for six days, abdomen distended, tender, tympanitic, vomiting, and looks very anemic. Enemata were given high—Nobles—and syrupus fuscus and water, no effect. Examination per vaginam: a soft boggy mass, circumscribed and filling the pelvic cavity. Hemoglobin, 30; white corpuscles, 10,600; patient prepared for operation. An opening was made in the posterior culdesac, when a dark sanguineous fluid escaped; on further examination the bowels and omentum were found adhered together by clots. A suprapubic incision was made and pelvis cleaned of all clots and membrane. The right tube was ruptured about the middle third, and from appearances must have contained a fetus of two months gestation, which, however, was not found, but might have been lost among the clots. There was over two quarts of blood in the abdominal cavity. It was necessary to separate and wipe several feet of bowel, so matted were they from adhesions. The uterus was twice its normal size; the right tube was removed, but the ovary left in place as it appeared healthy. Abdominal cavity flushed with normal salt solution. A vaginal drain was inserted, "patient placed in Fowler's position and stimulants administered. Patient improved and left the hospital March 18, 1909, cured.

INTERSTITIAL ECTOPIC GESTATION.

CASE II.—Miss W., admitted to hospital March 1, 1909, discharged March 20, 1909, age 22; family history, good; personal

history: began to menstruate at twelve years of age, regular every twenty-eight days. Present attack began January 28, 1909, with sharp pain in the right side; this was accompanied with nausea and vomiting, and she was compelled to remain home in bed for four weeks. Pain that was at first confined to the right side has become general over the abdomen.

Examination shows a tumor on the right side connected with the tube and uterus; patient prepared for operation, and on opening the abdominal cavity a tumor 4 inches long and 2 inches thick, with 4 inches of ileum attached was brought into view. Bowel relieved and tumor removed, which showed that the sac with the product of conception was partially in the uterus. Cavity in the uterus was closed, ovary not removed. Patient made a quick recovery.

ECTOPIC GESTATION.

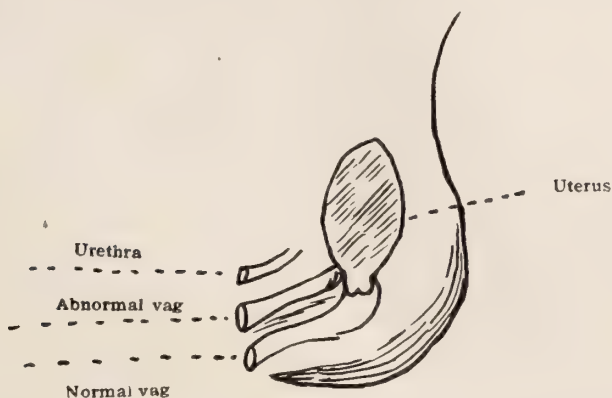
CASE III.—Mrs. M., age 20, family history good. Personal history: no diseases except the ordinary diseases of childbirth. Menstrual period began at fifteen years of age, regular every month till December 5, 1908; was seen February 7, 1909, at 6 P.M., by Dr. P. H. Hourigan, who found her suffering from shock, pain in right side and all symptoms of internal hemorrhage. When admitted to hospital one hour later was pulseless, with rapid and shallow breathing; hemoglobin, 40, and in extremis. Patient given an anesthetic, abdomen opened quickly, when right tube was found ruptured. This was immediately clamped and hypodermoclysis, normal salt solution given. The abdomen was filled with blood, tube removed, but ovary left in place. Patient left the hospital in three weeks.

Double Vagina

By IRVIN HARDY, A. B., M. S., F. S. Sc., Lond.
Surgeon in charge, Allegheny Heights Hospital, Davis, W. Va.

ABOUT September 25, 1903, I was called to see Mrs. B., age 23, white, primipara. I found her in labor; pains severe, which were coming on at intervals of fifteen or twenty minutes. After the usual preparation of hands and rubber gloves, I proceeded to make a vaginal examination and found what I at first thought to be a misused urethra, but by passing index finger into canal I found it opened into the uterus. I could feel the presenting part of child, which was vertex. This canal or abnormal vagina opened into uterus just at upper limit of cervix. The normal vagina, which was below, was rather small. From below up their relation was, normal vagina, abnormal vagina, and urethra, as I shall show by diagram. The abnormal os was doing its best to dilate, so at first there was a question as to which vagina would afford passage for the child. Later on—about two hours—the normal os dilated and while pains were severe she was unable to complete the labor unassisted. I called my asso-

ciate, Dr. R. Hardwick, and we proceeded to deliver with forceps, lacerating the perineum somewhat. The child was normal. Since that time she has had two normal births with no trouble.



My reason for reporting this case is that so far as I can learn there is no similar case of double vagina on record, *i.e.*, double vagina, single uterus; one vaginal canal directly over the other. If not, this should be made a matter of record.

Retention of Urine and its Treatment

[*The Hospital*, February 27, 1909.]

THE danger of completely emptying the bladder in certain cases of retention of urine is probably not sufficiently appreciated by the majority of practitioners in this country, nor is it enough emphasised in the clinical teaching in our medical schools. Yet the fact is referred to by Sir Henry Thompson in his book published in 1888, and modern textbooks on the subject, both English and Continental, warn against such a danger. In cases of acute retention the bladder may be safely emptied without any fear of evil consequences, but it must be clearly understood what is meant by acute cases. Acute retention of urine not only means inability for the first time to pass water, but also connotes no history of increased frequency, of dribbling, pain above the pubes before passing water, or of ammoniacal urine; any of these symptoms will give rise to the suspicion that a chronic retention of urine has already existed unknown to the patient. Nor need there be any fear of emptying the bladder in those cases of long-standing retention where the bladder has never been allowed to remain partially distended for any length of time; that is to say, where the patient has been relieved daily

of his residual urine by the catheter from the very beginning. It is with cases of long-standing retention which have never been relieved by the catheter that the danger lies of death within any time from twenty-four hours to three weeks after the removal of the urine. The immediate cause of death is suppression of urine.

The whole urinary system in such patients, from the calyces of the kidney down to the bladder, is one large cavity; the opening of the ureters into the bladder is no longer oblique, and the normal valvular mechanism of this arrangement is gone; the ureters, the pelvis, and the calyces of the kidney are all dilated. As a result of these changes the kidney is turning out urine against pressure, and not under normal conditions. When the urine is suddenly drawn off this pressure is at once lowered, and the lining membrane of the whole tract lacks the support that it has accommodated itself to. As a result the parts become engorged with blood, leading to the injected kidneys and bladder hemorrhages mentioned above.

How then should a case such as this be treated? In the first place the patient should never be attended to in the practitioner's surgery; he should be put to bed either in his own home or in the ward of a hospital. By means of a catheter a small amount of urine should be drawn off, not more than one-third of the whole bladder contents. This amount, of course, cannot be accurately judged. If in an adult the bladder is well above the umbilicus, it probably holds three pints; if but just palpable above the pubes, only some fifteen ounces. An equal amount of warm boric solution may then be run in through the catheter, allowed to mix with the urine, which is probably foul, and then drawn off again. This may be done some three or four times, so that the fluid in the bladder then consists of urine mixed with boric solution. The patient should be kept quietly in bed, and in twelve or even twenty-four hours' time a further quantity may be drawn off, leaving behind less residual urine than had been left before. In this way in the course of some three or four days the bladder may be cautiously emptied with perfect safety. During this time the patient may be on a full diet for a person at rest, the bowels should be well emptied, and some urinary antiseptic may be given. If a catheter cannot be passed and a suprapubic puncture be found necessary the same precautions must be taken, and a small amount only of urine drawn off on the first occasion.

In acute retention there is no danger in rapidly emptying the bladder, and it is, indeed, necessary to relieve the patient of his pain. The treatment of this condition comes under two heads—to assist the patient to pass his water, or to draw it off by means of some instrument. The decision will depend on the cause of the retention and the amount of pain.

The common causes of retention of urine are three: gonorrhea, stricture, and enlarged prostate. In the first of these conditions it is sometimes said that a catheter should not be passed for fear of infecting the posterior urethra; but this objection is not of much weight, for acute retention does not occur in the acute stage of the disorder, and is due usually to a prostatitis supervening on a chronic or subsiding posterior urethritis, and is brought on by some neglect of treatment when the patient thinks he is getting much better. But the catheter in this condition should be used with extreme care. If a soft india-rubber one fail to pass, a No. 12 French coudé catheter can be tried. No doubt a hot bath and morphia will often relieve the patient in this condition; but it is not a treatment over which much time can be spent, as the patient is in extreme pain from a bladder that has never been distended before, and permanent damage may result.

In retention due to stricture the pain is usually not so great and the retention less absolute. It is useful in such cases to have from the start some definite line along which to work. First, an attempt may be made to pass a catheter, but not too much time should be spent over this. If this fails, the patient should have a hot bath and a dose of morphia, and while he is in the bath another attempt at catheterisation may succeed. Even if this does not, the patient will very likely be successful in passing a small amount of urine. He can then be left for, say, an hour, when a general anesthetic should be given and a third attempt made to reach the bladder with a catheter. If this again fails, the bladder must be punctured above the pubes. The best catheters for cases of stricture are the olive-headed French ones, and if morphia is given a dose of half a grain should be used; small doses are useless.

In the third class of cases, the old man with enlarged prostate, there are two methods that can be used, and two only—the catheter and supra-pubic puncture. Baths and morphia are not likely to be successful, and the use of the drug may be dangerous. A soft rubber catheter will often find its way in along the tortuous urethra, and, failing that, the best kind to be used is the coudé or bi-coudé catheter. Whatever the cause of the retention, the immediate after-treatment is the same; keep the patient in bed, put him on a light diet, and get the bowels well open.

The Ophthalmotuberculin Reaction

[Abstracted by HERMAN D. ANDREWS, M. D.]

A REPORT of 1,087 instillations of tuberculin in the conjunctival sac by a uniform method was made by Dr. E. R. Baldwin in the issue of the *Journal of the American Medical*

Association, February 20, 1909. He obtained uniformity of procedure by furnishing all the different observers the same preparation of old tuberculin (human) in the strength of 0.3 and 0.5 per cent. and including pipettes graduated to 0.25 cubic centimeter. In all, 887 individuals were tested, in 190 the test being repeated. There were 310 cases of tuberculosis in some form, 265 suspected of tuberculosis, 127 subject to other disease and 185 supposedly healthy subjects.

In the records he found that in incipient stages of tuberculosis 67 per cent. of the tests were positive; in the moderately advanced 75 per cent. were positive, while in far advanced cases, the proportion dropped to 50 per cent. As an average for all the cases known to be tubercular 70 per cent. of the tests were positive. Of the cases of suspected pulmonary tuberculosis only 33 per cent. reacted, while in suspected other forms of tuberculosis 48 per cent. were positive. Reactions in other diseases were but 14 per cent. while healthy subjects showed 18 per cent. positive. In the incipient cases, where we wish most to be aided in diagnosis 71 per cent. were positive, but in the suspected cases where we could expect assistance in diagnosis only 33 per cent. were positive. As an ideal diagnostic method in tuberculosis the results show that the test falls short of the requirements, though relatively good in confirmation of diagnosis in clinically tuberculous cases.

The significance of age as a factor influencing the reaction cannot as yet be determined, but in this series, tuberculous cases between ten and fifteen years gave the highest percentage of positive reactions. Fever had apparently no influence on the chance of reaction.

Control tests were made with the cutaneous and subcutaneous methods. Results in both of these tests were positive more frequently than in the ophthalmic-test. As possible reasons accounting for the nonreaction of the latter may be named the following: uncertain absorption of the tuberculin; smallness of the dose required for safety; variations of the susceptibilities to the reaction in different individuals.

As to the clinical value of the ophthalmic-tuberculin reaction for prognosis clinicians are being impressed with its limitations. A positive reaction cannot be interpreted as an infallible criterion of existing disease. It only betrays the presence of infection, and whether it is recent or long healed must be determined by other means. In reality, reaction which takes place only to large or repeated doses of tuberculin are of little clinical value considered apart from other symptoms. The absence of reaction after such application is of far greater value in excluding tuberculosis. From his series, the writer feels that the advantages of the conjunctival test are found in cases where positive results follow the

use of very small amounts of tuberculin and that only absence of reaction to repeated and large doses has any value in excluding tuberculosis.

As to the danger locally, the writer found severe conjunctivitis in ten cases and one case of keratitis in a patient which had tubercular lesions, but in general, there are no great risks in the use of the non-repeated weak solution. However, the ill-results that have been reported should lead one to make the test with a feeling of responsibility.

Among other conclusions the writer states that : the conjunctival-tuberculin test performed with a single instillation has some value in confirming the presence of tuberculosis in the early stages ; it is of little value in confirmation when the symptoms of tuberculosis are only suspicious ; the test is unreliable for prognosis ; with proper precautions, danger to the eye is slight and need not preclude the test when other methods are inapplicable, as when fever is present ; its use should be restricted to adults.

TOPICS OF PUBLIC INTEREST.

Nutritive and Medicinal Value of Alcohol

The Committee of Fifty and its Work.

A FEW persons have assumed to question the efficacy and value of alcohol as a remedial agent. The subject is an old one, and recent attacks on the therapeutic value of alcohol have been largely undertaken in sympathy with, if not in furtherance of, efforts to correct an evil of social life by the entire inhibition of alcohol. When an effort is made to stop abuses of alcohol through the entire suppression of the thing abused, there is naturally a desire to secure what is termed scientific authority for it.

Recent unfavorable discussions of the effects of alcohol and of its therapeutic value merely show the conclusions of one or two investigators, who may be considered as in the field to prove a case, like an expert in court. Those who know the other side through experience and practice constitute about the whole mass of mankind residing in the portion of the world called civilised.

The most vigorous characters in history have been temperate users of alcohol in one form or another. Some of the greatest, like Alexander of Macedon, were not temperate.

The recent unfavorable expert testimony shrinks to insignificance beside the exhaustive investigations of the Committee of Fifty and its conclusions. The reports of this great body of unbiased investigators have not had popular circulation, chiefly because of the great extent and the lack of public interest. For

in reality the committee reported technically what nearly every intelligent person knew, but not in a technical way. The reports show conclusively that alcohol in suitable quantity acts as food.

"The Committee of Fifty" was organized in 1893 and headed by Hon. Seth Low, as president, Charles Dudley Warner as vice-president, and Professor Francis G. Peabody, D. D., of Cambridge, Mass., secretary.

Among the distinguished chemists connected with the investigations were Professor W. O. Atwater, Wesleyan University, Middletown, Conn.; Professor H. P. Bowditch, Harvard Medical School; Professor R. H. Chittenden, Sheffield Scientific School, of Yale University.

The committee included bishops and clergymen of several denominations, with business men, lawyers and authors, and the presidents of several universities.

After twelve years of careful inquiry, the work being divided among sub-committees, the conclusions were published in sections, as the committees rendered reports, in 1903-5. A summary of the conclusions of the committee was published in 1905, the introduction to the volume being written by Rev. Professor Francis G. Peabody.

Charles Dudley Warner wrote in Harper's Magazine, February, 1897, "That the prime business of the committee was not the expression of opinion or the advancing of one theory or another, but strictly the investigation of facts."

During the twelve years up to 1905 the committee had been in general session seventeen times, and its work is not yet finished.

For the purpose of correcting current misstatements as to the nature and effects of alcohol, some of the conclusion of the sub-committee of the committee of fifty on "The Physiological Aspects of the Liquor Problem" are briefly quoted in this paper. The chairman is Professor W. O. Atwater and the other members are John S. Billings, H. P. Bowditch, R. H. Chittenden and W. H. Walsh.

The most important experiments and investigations by this committee were conducted in the laboratories of physiological chemistry at Wesleyan University and Yale University. The experiments at Wesleyan under Professor Atwater were exhaustive and costly. The results were stated in two articles by Professor Atwater in Harper's Magazine for October and November, 1900, five years before the publication of the summary of the committee's work to which reference has been made.

Professor Atwater's first article in Harper's Magazine, October, 1900, was devoted to "The Nutritive Value of Alcohol," and somewhat extended reference to medicinal use especially in cases of critical illness.

Professor Atwater writes: "Is alcohol food? Has it a nutritive value? * * * The two chief functions of food are to furnish material for the formation of the tissues of the body, and to yield energy for warmth, and for muscular and other work. * * * The body uses the stored materials for food as it does the parts of the food which are not stored, but which are consumed as they are eaten. Alcohol contains no nitrogen, and, therefore cannot build tissue; it is rather to be classed with the fats and carbo-hydrates and if it has any food value, this must be as fuel. * * * When a man drinks wine, beer, brandy, or other liquor, is the alcohol oxidised? * * * I have found some seventeen investigations of sufficient importance to seem worthy of special consideration. The earliest were in 1846. The results of all but two were interpreted by their authors as indicating that alcohol is burned in the body." The most conclusive experiments to show that alcohol is burned in the body as fuel were by Anstie in England in 1865-1874.

Professor Atwater proceeds: "Since the work of Anstie the question has been how completely is alcohol burned?" Experiments in Bonn University, Germany, 1875-1883, by Drs. Binz and Bodlander, are detailed. These experimenters found that as a rule 95 per cent. or more of alcohol taken into the body in moderate quantity was oxidised. In 1871, Strassman in Berlin, found that with large doses of alcohol "only 6 or 7 per cent. escaped oxidation."

Professor Atwater continuing, says: "In the late experiments under my own direction, described beyond, alcohol was given in smaller doses, and especial pains were taken to measure accurately the amounts which left the body by various channels. In these cases less than 2 per cent. has generally escaped oxidation. * * * As the experiments with alcohol have become more accurate, the proportion actually oxidised has appeared larger and larger. When taken in small quantities, say one or two glasses of wine or a glass of whiskey at a time, the alcohol has been found to be burned at least as completely as bread or meat."

Having shown that alcohol is oxidised in the body, Professor Atwater proceeds to describe his exhaustive laboratory experiments with several men to ascertain if alcohol supplies working energy, if substituted in part for a regular diet. His apparatus was such as would show the results of regular foods and of alcohol. He says of these experiments: "The average energy given off from the body was in the experiments without alcohol 2,949 calories, in those with alcohol 2,952 calories per day. Neither my associates nor myself can find in them any indication of considerable extra radiation of heat under the influence of

alcohol, nor can we find anything which seems to us to justify the conclusion that the energy of the diet without alcohol was used more economically than that of the diet with alcohol. * * * * So far as I know, the experimenters whose work is most generally accepted as reliable are practically agreed that alcohol by being burned in the body protects fat from consumption." * * * In our own experiments the men lost on an average no more fat in the experiments with alcohol than in the corresponding ones with ordinary diet, and stored as much."

Of the medicinal and sustaining effects of alcohol in disease Professor Atwater says. "In talking with physicians about this subject I have been much impressed by the frequent and emphatic statements of their experience in administering alcohol to patients in forms of disease when the bodily activities are at a low ebb. They tell me that they frequently find that people in such condition will take without intoxicating effects quantities of alcohol which would under ordinary circumstances produce drunkenness. They say, furthermore, that there are many cases in which the bodily functions are maintained and life is even saved by alcohol when ordinary food could not be endured. * * * Dr. Anstie gives the details of a number of interesting cases of this kind, which he evidently studied with great care. From the standpoint of the physiological chemist, this effect of alcohol would seem entirely natural. The bodily functions are weakened and the power of digestion impaired. While the patient is lying still, the labor required of the muscles is not large, and the chief need is fuel to carry the body through the time of stress. What is wanted is a material which will not have to be digested, can be easily absorbed, is readily oxidised and will supply the requisite energy. I know of no other material which would seem to meet these requirements so naturally and so fully as alcohol. It does not require digestion, is absorbed by the stomach, and presumably by the intestines with great ease. Outside the body it is oxidised very readily, within the body it appears to be quickly burned, and supplies a large amount of energy."

The report of the sub-committee on the "physiological aspects" says of alcohol and digestion: "When alcoholic fluids are taken into the stomach in not too large quantities, there is first a direct stimulation, leading to the rapid secretion of a powerful gastric juice. This is followed by a more or less rapid absorption of the alcohol, accompanied in turn by an indirect or secondary stimulation of gastric secretion. * * * Regarding salivary digestion, alcohol and alcoholic beverages when taken into the mouth produce a direct stimulating effect upon the secretion of saliva." * * * Alcohol taken in moderate quantities produces effects on nutrition similar to those produced by the

starches, sugars and fats in ordinary food, in that it is oxidised in the body and yields energy for warmth and possibly for muscular work. Roughly speaking, four grains of alcohol will yield the same amount of energy as seven grains of sugar, starch or protein, or three grains of fat."

Of the frequent designation of alcohol as "a poison" when taken in excess, the committee report says: "There is no substance which is always and everywhere a poison. The term is relative; conditions and circumstances of various kinds must always enter into its conception. No one would maintain that a cup of delicately flavored tea is in any sense injurious or poisonous to the average adult and yet caffeine, the active principle of this cup of tea, is a poison as surely as alcohol. The term poison belongs with equal propriety to a number of other food accessories, as coffee, pepper, ginger, and even common salt."

While admitting frankly the injurious effects of excessive use of alcohol in causing disease, the committee says of some diseases usually attributed to alcoholic excesses: "It is important to know that the immoderate drinking of alcoholic liquors may be the first symptom of some chronic disease which, when later recognised, is erroneously ascribed to alcohol as the cause. It is known that many of the mental and nervous disorders of alcoholism, attributed to the toxic action of alcohol are, nevertheless, dependent in a large measure on an underlying defective constitution, as an excessive indulgence in alcohol rarely produces certain of these disorders in persons of normal constitution."

This brief abstract of the chief results of an exhaustive inquiry as to some effects of alcohol are submitted with confidence that much of current error and misrepresentation will be corrected. The Committee of Fifty is a very cautious body; for it has among its members total abstainers and prohibitionists; but all are honest men. So the truth in regard to a most useful agent has been barely told.

INSTITUTIONAL WORK FOR YOUNG PHYSICIANS.—Wm. P. Spratling of Baltimore, Md., describes the positions available for young physicans in connection with asylums and sanatoriums. The State institutions for the insane afford very desirable positions with a salary beginning with \$600 and maintenance and increasing by length of service and examinations for promotion up to \$4,500. Boards of Health and municipal departments also afford positions useful for those who do not wish to enter general practice at once, or need assistance through a few years. Sanatoria and public health resorts also employ resident physicians, who generally receive good salaries.—*Medical Record*, April 24, 1909.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

All communications, whether of a literary or business nature, books for review and exchanges, should be addressed to the editor, 238 DELAWARE AVENUE, BUFFALO, N. Y.

VOL. LXIV.

MAY, 1909.

No. 10

Conference on Medical Education

THE Fifth Annual Conference of the Council on Medical Education of the American Medical Association was held at the Auditorium Hotel, Chicago, Monday, April 5, 1909. Two sessions were held, one at 10 a. m., and the other at 2 p. m.

The chairman of the council, Dr. Arthur Dean Bevan, of Chicago, opened the proceedings at the appointed hour with an address in which he dealt with the problems awaiting solution in order to carry medical education standards forward to the proper point, to make them what they should be, to give them a respectability equal to the demand of the times. He reviewed the work of the previous conferences and pointed out the most important improvements that had taken place under the influence of the council. His reference to the work and powers of the state examining boards possessed especial interest. Through the courtesy of Dr. Bevan we are permitted to make an advance excerpt of his remarks on this topic from the address. He said:

THE POWER OF THE STATE BOARDS.

When all is said and done a clear and definite fact remains that the power to control and elevate the standards of medical education lies entirely and alone in the hands of the state boards. It is in the power of the state boards in the majority of the states of the Union this year to so raise the preliminary requirements and to exact fair and complete medical preparation as will secure for such states competent medical practitioners.

Briefly, the present situation of medical education demands for a satisfactory solution (1) the passing of the commercial medical schools and the development of strong medical colleges as the medical departments of universities; (2) endowments both private and state for the proper maintenance of such medical departments.

It has been demonstrated that such endowments could not be secured for the independent medical schools, and further, the experience of the past few years as shown clearly that the modern medical school needs such endowments as it cannot be

supported properly by the fees of students; (3) the first and most important public health measure is that each state should demand through its state licensing board complete and thorough medical preparation of those seeking to practise medicine within its boundaries. The desirability and value of the curriculum, with necessary equipment, and the like, from the state board standpoint is to be considered, as is also the question of making the state board examination more of a practical test of the candidate's ability to practise medicine.

The secretary, Dr. N. P. Colwell, next made his report of the work for the year, which included some of the conditions found, of medical colleges, as well as the status of medical education at the present time. Reports were then presented by the chairman of the ten subcommittees on medical curriculum as follows:

Anatomy, including Histology and Embryology, Charles R. Bardeen, Professor of Anatomy, University of Wisconsin, College of Medicine, Madison, Wis; Physiology and Physiologic Chemistry, Elias P. Lyon, Professor of Physiology, St. Louis University, School of Medicine, St. Louis; Pathology and Bacteriology, William T. Councilman, Professor of Pathology, Harvard Medical School, 240 Longwood avenue, Boston; Pharmacology, Toxicology and Therapeutics, Torald Sollmann, Professor of Pharmacology and Materia Medica, Pharmacologic Laboratory, Western Reserve University, Medical Department, Cleveland, O.; Medicine, including Pediatrics and Nervous and Mental Diseases, George Dock, Professor of Medicine, Tulane University of Louisiana, New Orleans; Surgery: General and Special, Charles H. Frazier, Professor of Clinical Surgery, University of Pennsylvania, Department of Medicine, Philadelphia; Obstetrics and Gynecology, Joseph B. DeLee, Professor of Obstetrics, Northwestern University Medical School, Chicago; Diseases of the Eye, Ear, Nose and Throat, George E. deSchweinitz, Professor of Ophthalmology, University of Pennsylvania, Department of Medicine, Philadelphia; Dermatology and Venereal Diseases, William A. Pusey, Professor of Dermatology and Clinical Dermatology, College of Physicians and Surgeons, Chicago; Hygiene, Medical Jurisprudence and Medical Economics, F. F. Westbrook, Professor of Pathology and Bacteriology, University of Minnesota, College of Medicine, Minneapolis.

These reports recommended a curriculum which aggregated 4,400 hours. At a meeting of the chairmen held the day previous, the reports had been compared, a few duplications of courses were eliminated, and the total hours for each section reduced as follows:

<i>Subject.</i>	<i>Hours.</i>
I. Anatomy, including histology and embryology...	700
II. Physiology and Physiologic Chemistry, including 80 hours of Organic Chemistry	530

III.	Pathology and Bacteriology	500
IV.	Pharmacology, Toxicology and Therapeutics	240
V.	Medicine, including Pediatrics and Nervous Diseases	890
VI.	Surgery: General and Special	650
VII.	Obstetrics, 180 hours, and Gynecology, 60 hours..	240
VIII.	Diseases of the Eye, Ear, Nose and Throat	140
IX.	Dermatology and Syphilis	90
X.	Hygiene, Medical Economics and Medical Jurisprudence	120
	Total	4,100

These figures were voted to represent the maximum requirement of a medical curriculum covering four years of 32 weeks each of actual work. It was the opinion of those present that the curriculum should not be made a hard and fixed requirement with which all colleges should comply. Its chief value was considered to be in its suggestiveness and from the fact that it represented an exhaustive study by over 100 leading medical educators, representing all the subjects included in the curriculum.

In the afternoon the state boards relation to standards and as to the character of the examination were dealt with in the following papers:

Some Results of Higher Standards of Preliminary Education, Richard H. Whitehead, Dean of the Department of Medicine of the University of Virginia, Charlottesville. Discussion.

The Character of the State Medical License Examination, Fleming Carrow, member of the State Board of Registration in Medicine of Michigan, Detroit.

Dr. Whitehead gave the results of higher requirements in his school. While the increase caused a reduction in the number of students it greatly raised the average quality. He added that while the south had some serious educational problems to work out, the Council should not lower its standards on that account. The south needed the standard as a goal to be striven for. In conclusion, Dr. Whitehead said: "The day is not so very far off when there will exist the proper basis for high standards in medical education. Already the leaven of high ideals is working in at least three southern universities. And so, I say, do not worry about the south; it will work out its educational development in due time. In the meanwhile the Council can be of much service by stimulating, encouraging, helping—but not by lowering its standard."

While the subjects presented material of interest the discussions were less spirited than usual, indicating that much of the opposition to advances proposed has disappeared, Dr. Whitehead's final sentence, being an index of that fact. The attendance comprised about one hundred persons.

Honors to Dr. Henry Reed Hopkins.

THE Medical Society of the County of Erie, under the presidency of Dr. Charles A. Wall, did itself great credit in the reception tendered to Dr. Henry R. Hopkins, at the University Club on the evening of April 19, 1909. The exercises belonging to a regular meeting of the society were dispensed with and the ceremonies incident to the reception substituted.

An appropriate program had been planned which was carried out without hitch or friction. Dr. Hopkins had served the society some forty years as member and chairman of the board of censors; he had taken the initiative in the creation of a state board of medical examiners; he had been the first cause of clearing the city of Buffalo of quacks and criminal practitioners; he was the 97th president (1903) of the medical society of the State of New York. For these and many other reasons, not essential to mention now, it was considered proper to recognise Dr. Hopkins's services to the profession and the people at large in a public manner.

First, a number of addresses were delivered. Dr. Charles G. Stockton, the reigning president of the Medical Society of the State of New York, spoke of Dr. Hopkins's activities in promoting the scientific work of that body, of his labors for many years on the committee of hygiene, and humorously alluded to the attack of "nostalgia" which developed when the society and the association were amalgamated. Dr. Stockton spoke in his usual happy vein.

The next speaker was Dr. William Warren Potter, president of the State Board of Medical Examiners, who reviewed Dr. Hopkins's work in relation to the establishment of the board, which marked the beginning of higher medical education in this state. Mr. John Lord O'Brian, United States Attorney for the Western District of New York followed with a clever and humorous address concerning his relations with Dr. Hopkins, while he, Mr. O'Brian, was counsel for the Medical Society of the County of Erie.

Dr. DeLancey Rochester dealt with Dr. Hopkins's bold stand at different times in protecting the people from medical fakirs and mountebanks. Dr. P. W. Van Peyma spoke of the part the distinguished guest played in creating midwifery legislation, also in the interest of the people. Dr. Edward Clark, formerly president of the Medical Society of the County of Erie, dealt with questions of legislation in which both he and Dr. Hopkins had together taken an active part. Dr. William C. Phelps, a veteran in professional work, spoke for the profession at large.

At the close of the speechmaking, a silver loving cup, suitably engraved, was given to Dr. Hopkins. He responded in an

appropriate speech thanking his colleagues for their kind words and the token of their appreciation of his work.

A collation then was served at which the good fellowship continued. And so ended a most enjoyable evening.

A Notable Achievement.

MR. Charles Gordon Hayd, president of the class of 1909. Medical Department University of Buffalo, to be graduated May 28, instant, recently took the examination for interne at the New York Postgraduate Hospital. Thirty candidates entered the arena, one having failed to appear before the contest began.

These young men represented nearly all the universities and other great medical schools of the land. At the end of the first day one-half the number had disappeared. The second day proved too much for one-half the remainder; while the third day left but four still "in the running." And behold, Mr. Hayd "led all the rest," having secured first place in an examination noted alike for its severity and fairness.

It should be remarked that Mr. Hayd had already passed, standing first on the list, the examination for interne at the Buffalo General Hospital. This place he resigned when the New York appointment was won. The JOURNAL extends its congratulations to Mr. Hayd, who is a nephew of Dr. Herman E. Hayd, the well known surgeon of Buffalo.

GREATER University of Buffalo grows apace. Through the efforts of vice-chancellor Norton, \$27,000 have been added to the treasury and within the last few days the sum is further increased by more recent contributions. Let the good work go on.

THE health department is preparing to enforce the antisputting ordinance, which goes into effect on July 1st. Small yellow cards, bearing the words—"You are violating the law against spitting—you are subject to imprisonment or fine or both, by order of the health board—" are being printed ready for distribution.

The plan is to give these cards to school children, businessmen and others, who, when they see a person spitting on the sidewalk or in a public building or conveyance, are expected to hand one of the reminders to the offender. Other notices are being prepared for posting in public places.

ALLAN WILMOT, son of Mr. and Mrs. W. B. Wilmot, died March 31, 1909, of spinal meningitis. He was a student at the University of Buffalo and a graduate of the Delavan High School.

PERSONAL.

DR. ROSWELL PARK announces the removal of his offices from 510 Delaware avenue to 430 Delaware avenue. Dr. Edgar R. McGuire has removed his office and residence to the same address. The office hours of Drs. Park and McGuire will be from 2 to 4 P. M., Sundays by appointment only. Telephones: Bell, Tupper 4; Frontier, 637.

DR. HARRY R. TRICK, of Buffalo, announces his removal from No. 1195 Main street to No. 605 Elmwood avenue, "Elmwood Heights," apartment No. 1.

DR. JAMES E. KING, of Buffalo, has succeeded Dr. DeWitt G. Wilcox in the conduct of Lexington Heights Hospital, 173 Lexington Avenue, Buffalo, N. Y.

DR. GEORGE N. JACK, of Buffalo, announces the removal of his office from 91 Niagara street to 901 Mutual Life Building, 202-218 Pearl street. Hours: 9 to 1. Excepting Sundays.

DR. LUCIEN HOWE, of Buffalo, who has been in attendance upon the International Ophthalmological Congress at Naples, has returned. He was accompanied by Mrs. Howe.

DR. W. L. ALLEN, of Williamsville, has been elected president of the Board of Health of that village for the current year. Dr. W. H. Baker is appointed health officer for the year.

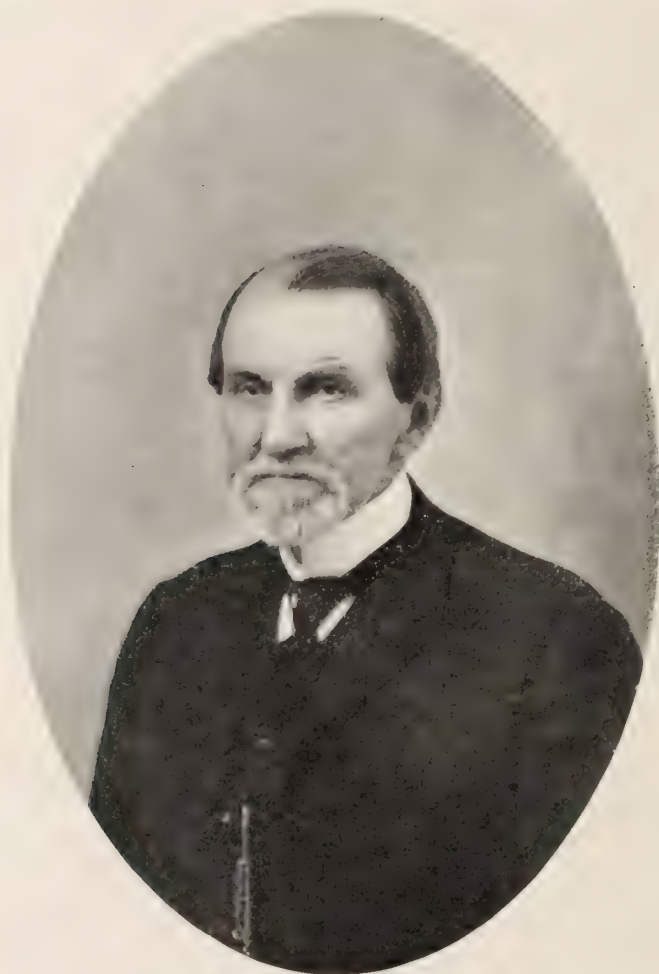
OBITUARY

DR. ALBERT GROVES ELLINWOOD, of Attica, N. Y., died at the German Deaconess's Hospital, Buffalo, March 26, 1909, aged 84 years. He was the son of Eli Ellinwood, and was born at Clinton, N. Y., July 1, 1824. He received his preliminary education at the Clinton Grammar School. Meanwhile, however, the family had removed to Pembroke, N. Y., where some of its members still reside. Dr. Ellinwood received his medical degree at the University of Buffalo in 1848, and immediately thereafter began practice at Cowlesville, N. Y., in association with Dr. M. E. Potter. Later he removed to East Pembroke, and finally, in 1862, located at Attica where he continued to reside until his death.

Dr. Ellinwood enjoyed the confidence of a large clientele during his entire medical career. In 1855, he married Arlotta

Maria Bass, of Randolph, Mass., who died a few years ago. One son, Dr. F. F. Ellinwood, of Utica, and two daughters, both of whom married clergymen, survive.

Dr. Ellinwood kept his activity until about a month previous to his death. He was a member of the local and general medical societies, and served as surgeon of the Erie railway for some-



ALBERT GROVES ELLINWOOD, M. D.

thing more than forty years. He was a courtly gentleman, respected of all who knew him.

DR. WILLIAM HYSER, of Plainfield, Mich., died at his home March 20, 1900, aged 82 years. He graduated at the University of Buffalo in 1850.

COLLEGE AND HOSPITAL NOTES

THE sixty-third annual commencement of the Medical Department of the University of Buffalo, will be held at the Teck Theater, Friday, May 28, 1909 at 11 A. M. The program is not yet out but the usual ceremonies, doubtless, will be observed. The Alumni Association will begin its annual conclave Friday evening, May 25, with a reception, addresses, election of officers, and a collation. During Wednesday and Thursday, clinics, luncheons, and other entertainments will take place.

BOOKS AND AUTHORS.

International Clinics. A Quarterly of Illustrated Clinical Lectures and especially prepared articles on Treatment, Medicine, Surgery, Neurology, Pediatrics, Obstetrics, Gynecology, Orthopedics, Pathology, Dermatology, Ophthalmology, Otology, Rhinology, Laryngology, Hygiene and other topics of interest to students and practitioners. Edited by **W. T. Longcope, M.D.**, Volume I. Nineteenth series. Philadelphia and London: J. B. Lippincott Co. 1908. (Cloth, \$2.00.)

These volumes appear four times a year with such regularity, and have continued to do so for eighteen years, that their popularity is attested by these facts. In this book there are two articles on treatment; four on medicine; four on surgery; two on gynecology and obstetrics; one on genitourinary disease; one on proctology; one on rhinology; one on dermatology; and one on pathology. Besides these there is a review of the progress of medicine for 1908, that part upon treatment being prepared by A. A. Stevens; that relating to medicine, by David L. Edsall, and Verner Nisbet; and that pertaining to surgery by Joseph C. Bloodgood. This addition to the regular articles serves to make this volume one of unusual interest, the resume on progress being exceedingly well excerpted. The clinical articles proper are in general presented by men of experience, some of whom are very well known in their respective fields of labor. The book is of interest and value, complimenting its predecessors in excellent fashion.

Progressive Medicine. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by **Hobart Amory Hare, M.D.**, Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia, Vol. XI, No. 1, March, 1909, Octavo, 277 pages. Per annum, in four paper-bound volumes, containing 1,200 pages. Lea & Febiger, Publishers, Philadelphia and New York: (\$6.00, net; in cloth, \$9.90, net.)

In the issue of this periodical before us we find surgery of the head, neck and thorax, occupying about one hundred pages, prepared by Charles H. Frazier; infectious diseases, including

acute rheumatism, influenza, and croupous pneumonia, excerpted by Robert B. Preble and covering over fifty pages; diseases of children, occupying thirty-two pages, and made up by Floyd M. Crandall; rhinology and laryngology, dealt with by D. Braden Kyle; and otology handled by Arthur B. Duel. Dr. Crandall directs attention to Dr. F. Park Lewis's (Buffalo) recommendation relating to the prevention of ophthalmia neonatorum. Dr. Lewis insists that midwives as well as physicians shall instill a drop of a 1 per cent. silver nitrate solution in the eyes of every new born infant. This dictum cannot be presented too often; as only by "continually hammering" can it be made clear that 30 per cent. of blindness can thereby be prevented. The book is full of original material offered in an interesting and instructive form.

Orthopedic Surgery for Practitioners. By **Henry Ling Taylor, M.D.** Professor of Orthopedic Surgery and Attending Orthopedic Surgeon, New York Post-Graduate Medical School and Hospital, etc.; assisted by **Charles Ogilvy, M.D.**, Adjunct Professor of Orthopedic Surgery at the same institution; and by **Fred H. Albee, M.D.**, Instructor of Orthopedic Surgery at the same institution. With 254 illustrations. New York and London: D. Appleton & Company. 1909. (Price, \$5.00, cloth.)

This work is prepared by an expert orthopedic surgeon not, however, for the specialist, but for the general practising physician. It is well that this should be so, for he rather than the specialist generally sees deformed children and even adults before they go to the orthopedist. He even has the opportunity of treating the deforming diseases in their early stages and before the resultant deformities have become fixed or permanently distorted. It is during these earlier manifestations that frequently simpler methods, comparatively speaking, prove effectual.

The author attempts to place in the hands of any intelligent practitioner such methods of treatment as will result in success, putting aside useless or indifferent material. He makes three divisions of his book—namely, general, special, and technical, the several parts being essential to a complete presentation of the subject in its most scientific form. The general part deals with causes, congenital crippling affections, nutritional disorders, infections, diseases of unknown origin, tumors and cysts, malignant diseases, spontaneous fracture, ununited fracture, diseases of the nervous system, examination and diagnosis, prevention, prognosis, treatment of underlying cause, complications, and treatment of deformity. The latter includes bandaging, strapping, splinting and all mechanical apparatus; also operative treatment, exercises and gymnastics.

In the special part the author handles all deformities and deals with them in sections—first, in the neck and trunk, next in the shoulder girdle and upper extremity, and finally in the pelvic girdle and lower extremity. In the last part technic is considered in all its details, such as means of increasing and diminishing local pressure, increasing and restricting motion,

bandaging, strapping, splinting, general and special, material such as plaster of paris, celluloid, leather, steel and the like, leg splints,—ankle, knee and hip—pelvic, arm, spinal and neck splints. In fact, nothing is neglected that science and art, working together, can devise or apply for the cure of deformity, congenital or acquired.

Taylor's twenty-five years' experience, surrounded as he has been by men of great skill and scientific attainments in orthopedics, qualifies him to express opinions and deal with questions of great difficulty in an understanding manner, that imparts clearness to the reader, as well as satisfaction to the learner.

The book is beautifully printed on heavy calendered paper and the illustrations portray the author's meaning and intent with emphasis. A list of orthopedic literature and an excellent index add a finish to the work, that is one of the best treatises on the subject.

Transactions of the American Surgical Association. Vol. XXVI. Edited by **Richard H. Harte**, Recorder. Printed for the Association by William J. Dornan, Philadelphia. 1908.

Although this great association has put forth many excellent volumes since it was organised by Samuel D. Gross in 1880, it is doubtful if any have been as resplendent as this one. All the papers are of exceptional good quality while many of them are brilliant. Mr. Moynihan, of Leeds, accentuates his second visit to the association by reading a paper entitled "Late results after operations for benign diseases of the stomach and duodenum," it being the first of a series of discourses on stomach and duodenal diseases, with special reference to their surgical cure. The other participants in this symposium were William J. Mayo, John B. Deaver, William L. Rodman, John B. Roberts and F. E. Bunts. It was a notable company and the contributions were worthy the men comprising it. John B. Murphy read a sterling paper on perforative peritonitis, that was followed by a brilliant discussion, during the course of which Mr. Moynihan, while taking part, paid high tribute to Dr. Murphy.

We should like to deal, in extenso, with this splendid volume but inasmuch as it is available for those who may wish to possess it, we hardly think it desirable to do so, particularly as we've said quite enough to give a hint of its value to any one who practises surgery. It is a beautifully printed, well indexed book of seven hundred and fifty-six pages.

Transactions of the Section on Obstetrics and Diseases of Women of the American Medical Association at the 59th annual session held at Chicago, June 2, 5, 1908.

This section at its last meeting was presided over by Dr. Walter Blackburn Dorsett, of St. Louis. He chose for the subject of his address, "Criminal Abortion in its Broadest Sense." It is an important topic and was well handled by Dr. Dorsett. The book is filled with excellent papers, some of which are by

distinguished men. August Martin, of Berlin, presented the topic of "Genital Tuberculosis," an important topic well set forth and discussed with ability. The grouping of the work of this section into one volume where each and every contribution can be seen at a glance and studied at one's pleasure is a striking argument against leaving them to the mercies of a journal, where they are seen by few and fewer still read them.

Concerning Lafcadio Hearn. By **George M. Gould**, M.D. With a **Bibliography** by **Laura Stedman**. Duodecimo, pp. 416. Illustrated. Philadelphia: George W. Jacobs & Co. (Cloth, \$1.50.)

In some quarters, wherein dwell the miniature-domed ones and narrow-visioned peoples, there has been breathed criticism of Dr. Gould for the penning of this volume. It has been said he was harsh in some of his statements regarding Lafcadio Hearn and his early life and personality; that he was remiss in using material concerning Hearn secured while the latter was a guest in his house. All of which is the veriest tommyrot. Those of us who knew Hearn, even casually, are familiar with his eccentricities and took him at his true value; we accepted his follies, but we did not excuse them as the vagaries of an absorbed genius, and there be records of where he was incontinently fired from a newspaper office because he publicly cohabited with a negress; and this, in spite of the fact that his work as a writer was the most brilliant and the most alluringly weird of any writing which was being done at that.

Dr. Gould did not take Hearn into his home. Whether he took him in for study purposes makes no difference to anyone and the question of the ethics of hospitality has no place in the discussion. The fact that Gould did study Hearn and has written of him is sufficient, and the result is a careful and complete analysis of one of the most complex and interesting literary characters which the world has ever produced.

Hearn was a genius; so was Byron; but no one with ladylike instincts or even gentlemanly tendencies, no matter how deeply he may revere Byron as a writer can overlook or forgive him for biting a lady in the cheek in an excess of what it has pleased some of his more deeply-steeped worshippers to consider an excess of zeal in a God-given genius. Nor can we forgive or overlook the brazen persistency of Hearn's Cincinnati love affairs.

The book under consideration gives us an honest study of Hearn from all angles. The life and letters of Lafcadio Hearn, written by Elizabeth Bisland, does the same but with this difference: that in the latter work there are rough spots which have been smoothed over with Miss Bisland's hand of gentle grace. Gould simply lifts the veil and shows the picture; and, while the Bisland book is concededly invaluable as a literary study, Gould's work is none the less so and the two together make a complete exposition of a most remarkable and fascinating character.

Gould tells as much as is known of the origin of Hearn and that much is little. It is however, fairly well established that his father was an English army surgeon and his mother a Greek. For his father, Hearn had some degree of affection; but of his mother he appears to have had little concern either as to her whereabouts or her origin. It is the first unnatural note which is struck in the life of this most brilliant and unnatural man. All through Hearn's life there ran a strain of atheistic cynicism; he revelled in the gruesome; he consorted with illiterates and depravity; he was physically somewhat brave, morally, a cringing coward; his mind, unnaturally acute was retentive to a degree, and he wandered far afield into the realms of imagery and painted word pictures of alluring elegance and sweetness then to turn gleefully to a palpitating bit of vital news and write such wondrously descriptive phrases as to make his reader stare wide-eyed at the scene that the magic of his pen conjured before the vision. He was not an educated man, as education is accepted as concerning book learning; but he was an observer and he had the power to place what he saw and repeat what he heard into such exquisite language that he was, to the reader, wholly charming. Physically, he was a bit of anatomic patchwork; his bulging eye, his weak features, his thin body were out of all proportion to his mental attainments; he walked with what has been described as a "feline tread;" soft-footed, creepy, gliding and soundless; and there was always that impression given in his attitude that he contemplated some overt act. This attitude it is quite likely may be ascribed to his intense modesty and his shrinking nature which endeavored at all times to hide his physical defects.

Hearn was not a great man in any sense of the word; he was an imitator (Gould says he was an echo) and followed closely the school of the French writers; this is apparent in all his writings; there are even strong traces of his copying of the Poe style as is evidenced by his famous report of the "Tan yard murder" in Cincinnati; a bit of newspaper work which, while it would not be tolerated by any newspaper in the world of today was, nevertheless, a classic for vivid, if disgusting, descriptive writing. In this he described a body which had been burned in a furnace and he spake glibly, almost joyously, of burning bones and bubbling brains and bursting skull. He was an imitator of other writers' style, but he added to his imitation such imagery as made his work really marvelous and almost original.

It was in 1889 when he went to Gould's home as a guest. Here, en passant, is an illustration of the man's nature. He would sit and talk to his host for hours, and then go to his room and write Gould a long letter. He seemed better able to express himself on paper than by speech. He hated to meet strangers; he was loyal to his friends.

Just prior to the time he went to Philadelphia he was in New York and visited Colonel John A. Cockerill, then the editor of *The World* and it was during this time—the days and weeks he

spent in the metropolis that the writer of this saw him during his easiest moments, for it was Colonel Cockerill who was his long time friend and mentor; it was Colonel Cockerill who really "discovered" him back in the Cincinnati days when Colonel Cockerill was city editor of the *Enquirer*. Gould tells of their first meeting. Hearn had been struggling. He wrote something for publication and went to the *Enquirer* office to sell the manuscript. He had not the courage to go to Cockerill's office but walked with that "feline tread" up and down the hall for hours until Cockerill came out and then, in shrinking, abashed manner offered the manuscript. Cockerill, always gentle in his dealings with strangers with manuscript took the story and read it. That was the "discovery" of Hearn as a writer and from that day dates his rise in literature. It was during the time of this employment that he wrote the famous Tan yard murder story. It was during these days, too, that he was so careless of his love wanderings that Cockerill found it necessary to discharge him from his employ in spite of the fact that he was the most brilliant newspaper writer of the day. He tried to secure a license to marry a negress. He cohabited with her openly and shamelessly.

When he visited Cockerill in New York he had done much excellent work and had been accepted by the reading public as a character of fixed reputation in literature whose beautiful language and exquisite thought were impressing themselves on the letters of the day.

Of his later works all is known; how he went to Japan, married and raised a family; of his Japanese folk-tales we are familiar and yet, through it all there runs an undercurrent of deficiency which crops out at unsuspected and unusual moments; a deficiency which gives evidence that there was in Hearn a degenerate strain which by some fortuitous circumstance stopped short of actual criminality and assumed the brilliancy of genius; for of a truth the dividing line in degeneracy which separates the criminal from the genius is exceeding fine.

That Hearn's writings had an influence on the newspaper writings of the day is apparent to one familiar with the figures and the work of the times. Of course, natural advancement in methods had wrought a change in the basic elements of descriptive work; but the famous Tan yard murder story, written years ago by Hearn, that and the wonderful deductive powers of Dupin, were the inspiration for a somewhat famous news story written in New York in the late eighties shortly after the visit of Hearn to Cockerill, the tale of which is interesting. A dismembered male body was discovered in a trunk in Baltimore, and the head was missing. Among the newspapermen who went to Baltimore and came back with the fragments of the murdered one, was a newspaper man who had been a student of Hearn's methods and of Poe's. He wrote a story descriptive of the manner in which the man had been murdered and the body dismembered. A few days later when Unger was arrested for the

murder of August Bolle and confessed, the confession and the newspaper description, written before the body had been identified, were with few inconsequential exceptions, almost identical.

Gould's book on Hearn is a remarkable study of a remarkable man, and it is an invaluable addition to literature. Hearn was great in a literary sense only; and because he was and because his influence on literature is lasting we may be content to step through the mire of his selective individuality that we may reach the flowers of his fancy.

N. W. W.

The Changing Values of English Speech. By Ralcy Husted Bell. New York: Hinds, Noble & Eldridge, Publishers.

This book is designed as a companion work to the *Worth of Words*, and it is not only valuable as a contribution, but it is exceptionally well written in Dr. Bell's invigorating style even if—and this is said in all sincerity—it be myopic in one place.

The author very properly condemns scientific writings as being done into exceeding poor English, and declares the pulpit to be fairly free from common errors of speech. It is to the editorial writers of the newspapers that he gives credit as the greatest and strongest conservators of our language "because their influence for good form is constant and far reaching." None will disagree with him in this; it is quite true; but he falls into with disregard of facts when he says: "The average 'reporter' is not particularly a paragon in many and nameless essentials; and yet, be it said to his eternal glory, his English is far from vile when one considers the kind of stuff he drinks and the stress and action laid upon his work."

It is quite likely that in his search for examples the author has been led into the narrow by-ways of hasty and yellow journalism. The daily newspaper, it must be admitted, does frequently contain glaring errors of grammatic construction; but the average reporter, as a rule, is a writer of pure English. He may at times drop into the vernacular, and it is doubtful if even Dr. Bell would hesitate to admit that even here one may find gems of speech. He does the "average reporter" an injustice. There are in every large city an hundred "average reporters" who write English of such virgin purity that it would seem to properly belong within the pages of a school girl's book. It is certain that the "average reporter" will be glad to learn that his English is not "absolutely vile" in the opinion of the author.

The telling of the development of language is excellent, well done and historic. In the chapter devoted to Intensitives the author gives us many delightful and material pages. He also brings in that exquisite story about Henry W. Grady's visit to a Boston home of culture and refinement where, when the guests were departing, the hostess said: "Mr. Grady, do say something original. All my guests have said they have had a delightful time or something equally trite and stupid. I expect something better of you." And Grady, in his courtliest manner gave it to her: "Madam, I have had one hell of a time." Did

the lady get fussed? Not a bit. She wasn't even surprised; but in tones of perfect breeding she answered: "Mr. Grady, I am damned glad of it."

There is little in the book to criticise. It is one of the volumes—one of the very few—which one really enjoys and from which one gets nothing but good. The chapter on English orthography and simplified spelling tells all about the various and abortive attempts to make spelling easy, from the very first effort to the present day display of activities of the self-constituted board which starting with a dozen, and has finally become mired in a maze of mysterious and lop-eared words. If one has an honest yearning for solid information he'll get it in this book and plenty of it.

N. W. W.

Parcimony in Nutrition, by **Sir James Crichton-Browne**, M.D., LL.D., F.R.S. 12 mo. Funk & Wagnalls Company, New York. (Cloth, 75 cents, net.)

The author of this monograph is so widely known that attention will be attracted to his little work from that fact alone; but over and beyond this, it deals with a topic full of interest to every intelligent man and woman, not to mention physicians themselves. The author made this the subject of his presidential address to the section on preventive medicine at the meeting of the Royal Institute of Public Health at Buxton, England, in July, 1908, and has expanded it for publication in the present form. Sir James regards nutrition as an important branch of preventive medicine. This sentence contains a vast amount of common sense: "Could we but secure adequate supplies and an equitable redistribution of food, restricting gluttony on the one hand and abolishing starvation on the other, we should vastly lighten the task of the sanitary and of the social reformer, and witness a gratifying drop in the death rate." In the next paragraph he says "What must I eat to be saved?" is a question often heard and one "to which answer is made by a shouting multitude of enthusiasts, cranks, and empirics, each with an infallible dietetic system of his own." Sir James attacks Professor Chittenden's investigations and statements in the most courteous manner, nevertheless forcefully and convincingly. He admits that the distinguished Yale professor has dealt with the question of the appropriate proteid intake "in a manner that is at once painstaking and brilliant, laborious and fascinating."

Briefly stated Chittenden's conclusion is "that the daily amount of proteid or albuminous food required for the maintenance of health and vigor is not more than one-half that hitherto regarded as necessary." Sir James enters the classics describing food and meals in Homeric times, and speaks of the culture of the Greeks and their liberal supply of meat food. The book is most charmingly presented in choice English and is highly instructive of the topic chosen, which itself is unique.

This volume contains the proceedings of the annual meeting held at Pittsburg, May 28, 30, 1908, and of the four section meetings. It is filled with scientific papers of interest, some of which are elaborately illustrated. The book is well printed and substantially bound. The society is a credit to the department of medicine with which it deals.

Report of the Commissioner of Education of the United States for the year ended June 30, 1907. Vols. I-II. By **Elmer Ellsworth Brown**, Ph.D., LL.D. Washington: Government Printing Office. 1908.

This interesting report contains much of value to educators. The bureau, established in 1867 as a department, was created an office in the Interior Department in 1869. Its growth has been slow, not commensurate with the increase and development of education in the United States, but under the five several commissioners that have presided over it, a substantial foundation has been laid. It is interesting to learn from this report that Congress appropriates \$100,000 for educational purposes in Alaska, with which fifty-two public day schools have been conducted for natives, with an enrollment of 2,639, and an average attendance of 1,139. It is a curious fact that the Alaska division not only has charge of schools, but also of the government reindeer in that territory, now numbering over 15,000 head. They are mostly owned by the government, but Eskimos and Laplanders, and also the mission societies of several churches are owners of smaller herds.

BOOKS RECEIVED.

Textbook of Embryology, by Frederick Randolph Bailey, A.M., M.D., adjunct professor of histology and embryology, college of physicians and surgeons (Medical Department of Columbia University), and Adam Marion Miller, A.M., instructor in histology and embryology at the same institution. With 515 illustrations. New York: William Wood & Company. 1909.

Elementary Practical Treatise on Diseases of the Larynx and Pharynx by Dr. E. J. Moure, surgeon in charge of the nose, ear and throat department of the Faculty of Medicine, Bordeaux. Translated and adapted by J. Malcom Farquharson, M.B. F.R.C.R., Edin., lecturer on diseases of nose, ear and throat in the School of Medicine of the Royal Colleges, Edinburgh, etc., with 210 illustrations. New York: Rebman Company. 1909.

Conservative Gynecology and Electro Therapeutics: A Practical Treatise on the Diseases of Women and Their Treatment by Electricity by G. Betton Massey, M.D., attending surgeon to the American Oncologic Hospital, Philadelphia; Fellow and Ex-President of the American Electro-Therapeutic Association; Member of the American Medical Association, etc. Sixth edition, thoroughly revised. Royal octavo, 462 pages. Illustrated with twelve (12) original, full-page, chromo-lithographic plates and fifteen (15) full-page half-tone plates of photographs taken from nature, and numerous engravings in the text. Bound in

extra cloth. Price \$4.00 net. F. A. Davis Company, publishers, 1914-16 Cherry Street, Philadelphia, Pa.

Annual Report of the Surgeon General of the Public Health and Marine Hospital Service of the United States, giving the operations of the service, fourth fiscal year, 1908. Washington Government Printing Office. 1909.

Mortality Statistics, Department of Commerce and Labor, Bureau of the Census, 1907 Eighth Annual Report, by S. N. D. North, Director. Washington: Government Printing Office. 1909.

Atlas and Epitome of External Diseases of the Eye. By Professor Dr. O. Haab, of Zurich. Edited, with additions, by George E. deSchweinitz, M.D., Professor of Ophthalmology, University of Pennsylvania. Third revised edition. With 101 colored lithographic illustrations on 46 plates and 244 pages of text. Philadelphia and London: W. B. Saunders Company, 1909. Cloth, \$3.00 net.

Atlas and Epitome of Ophthalmoscopy and Ophthalmoscopic Diagnosis. By Professor Dr. O. Haab, of Zurich. Edited, with additions, by George E. deSchweinitz, M.D., Professor of Ophthalmology, University of Pennsylvania. Second revised edition. With 152 colored lithographic illustrations and 94 pages of text. Philadelphia and London: W. B. Saunders Company, 1909. \$3.00 net.

MISCELLANY.

ARMY MEDICAL CORPS EXAMINATIONS.—The Surgeon General of the Army announces that preliminary examinations for appointment of first lieutenants in the Medical Corps of the Army will be held on July 12, 1909, at points to be hereafter designated.

Full information concerning the examination can be procured upon application to the "Surgeon General, U. S. Army, Washington, D. C."

MEDICAL INTERNE.—Government Hospital for the Insane. June 16, 1909. The United States Civil Service Commission announces an examination on June 16, 1909, at the usual places, to secure eligibles from which to make certification to fill at least two vacancies in the position of medical interne (male), Government Hospital for the Insane, Washington, D. C., at \$600 per annum each, with maintenance, and vacancies requiring similar qualifications as they may occur in that hospital.

FREE SAMPLE of a new Patent Two Finger Obstetrical Examination Cot will be sent to Physicians sending card or prescription blank. Other Novelties. Address, MEDICAL EQUIPMENT Co., 149 West 23d. Street, New York.

WANTED slightly used instruments and all kinds of office equipment in good condition. Fair prices for reliable goods. Distance no object. Write HENDERSON, 149 West 23d. Street, New York.

BUFFALO MEDICAL JOURNAL.

VOL. LXIV.

JUNE, 1909.

No. 11

ORIGINAL COMMUNICATIONS.

The Next Twenty-five Years in Surgery.¹

By ROSWELL PARK, M. D., LL. D.,

Professor of Surgery in the Medical Department of the University of Buffalo.

I AM not unmindful of the consideration and compliment which you have shown in thus featuring me upon this evening's program. It seems as if I never can repay my friends and colleagues who have done so much to make memorable in my life this anniversary of the twenty-fifth year of my teaching in the Buffalo Medical School.

I have been asked to give a glance into the future and to forecast what the next twenty-five years may accomplish in the domain of surgery. To illustrate the impossibility of doing this, I can only mention some of the accomplishments of the past twenty-five years that have so far exceeded our expectations as to show the futility of any such effort; nevertheless, by instituting comparisons between then and now, it may be worth while at least to make the attempt, although I shall not have the pleasure of saying at the end of the next quarter of a century,—“I told you so.”

Twenty-five years ago we used to think that we had about reached the limit of what the surgeon could accomplish, yet such have been the advances made in our art and science that one may epigrammatically yet truthfully say that the impossible or unjustifiable of yesterday has become the commonplace or even the discarded practice of today. I have not infrequently made this comparison,—that among all the applied sciences none have made such rapid strides as has surgery, with the possible exception of electricity. Thus today practically no organ of the body has remained unattacked, and it would veritably seem as though, topographically at least, we had reached territorial limits. But

1. Being the substance of an address before the Alumni Association of the Buffalo General Hospital, at a meeting commemorating the author's completion of his twenty-fifth year in the chair of surgery.

here we must make a distinction between territorial limits and limitations, inasmuch as while we have brought all the organs into actual touch with the knife, we have not yet learned just how much we can safely do with them. First of all, and with the greatest probability, it may be said that what the surgeon may accomplish will depend in large measure upon the discoveries made during the same period in the physical sciences, and the extent to which he can avail himself thereof. For example, twenty-five years ago who ever dreamed of the possibilities afforded by the cathode rays or by radium. Who could have foreseen the realisation of the old philosopher's dream,—namely, the transmutation of metals; and yet, it is now known that in the presence of radium, copper changes to lithium, and then to potassium and sodium, while the emanation from radium becomes itself neon and argon (Ramsey). These may not have any bearing upon surgery, and yet, I would not like to deny the possibility of a metal suture made, say, of copper, which under the influence of radium applied externally might undergo such changes as to lead eventually to its disappearance, if this were considered worth while.

The new discoveries in physiology and biology have also the widest importance to the surgeon, and are not confined alone to conditions involving the alimentary canal.

When we know more about the actual causes of death we may be better able to avoid them. I have on another occasion coined the expression, "thanatology," which I believe to be a legitimate term that might well be made to cover a systematic study of those causes which bring about actual cessation of life, and that would be a far different study from pathological anatomy though necessarily connected with it. The surgeon then will profit by the erection of thanatology into a distinct science. When, for instance, a heart removed from the body can be made to beat more than forty hours after the death of the individual, then we have a right to raise anew the question: What really constitutes death? We have much to gain from discoveries concerning the blood and sera, the nature and causes of hemolysis, and of the various toxins and substances which produce it. This problem of hemolysis is indeed one of universal interest, but its practical bearing perhaps concerns the surgeon more than anyone else, and for quite obvious reasons, because the importance of supposedly simple transfusion of blood becomes now very great; in fact, every gain toward a more intimate knowledge of our body chemistry can but redound to the benefit of theoretical and applied surgery. Perhaps in no particular direction have we reason to hope for more than in the study of cancer, which still remains second upon the list of the ordinary causes of mortality. In this direction, if I read cor-

rectly the signs of the times, we may expect a general recognition of its parasitic character and of its infectiousness, and in proportion as these facts gain in general appreciation we shall have a more well-ordered prophylaxis, as well as much improved canons of treatment. What we need most of all is such improvement in our powers of diagnosis as to permit an early recognition of deep-seated cancerous lesions at a time when there is still some hope for treatment, be it operative or otherwise. While I dislike to be constantly repeating my own words, this meeting furnishes another possible opportunity to make better known this most important fact, which shall serve but as an incentive to further study and as an excuse for past failure; I refer you to the fact that cancer by itself has absolutely no symptomatology of its own. Signs it has, and when the lesion is superficial these are usually unmistakable. When, however, reliable *signs* are discovered in a deep-seated lesion it is at a time when hope must be abandoned. Think it over and you will appreciate the fact not yet generally realised that cancer by itself produces no symptom, and often no collection of symptoms, by which alone it may be distinguished; *i. e.*, its symptoms are common to more than one disorder so that there is no reliable guide save the signs above mentioned, and even these too often vague. But with studies and researches such as those already published, it is not expecting too much to hope that the next quarter of a century may afford us some test of an accuracy far beyond any at present in use, by which this most infernal of all diseases may at last be mastered.

And this leads me to speak of improvements in general diagnosis which will be of common benefit to all professional mankind. No one can foresee what these may be, but you may at least rely upon it that the surgeon will be quick to avail himself of any means by which he may improve his knowledge or his skill. Thus we may profit much by a clearer realisation of that unknown relation which exists between the ductless glands and, for instance, the sexual glands, and their relations to sexuality as well as sex problems, and I beg you to notice the distinction I make between these two. In addition to these we shall realise better their relations to such nutritional defects and disorders as imbecility, gigantism, dwarfism and cretinism, rickets and osteomalacia, especially that occurring during the later months of pregnancy. The relation of all of the so-called internal secretions to these and kindred conditions are of the greatest import to the surgeon, since upon his knowledge of what may be accomplished, for instance, by opo-therapy, will depend his selection of or abstinence from operative intervention.

Operative Surgery.—Twenty-five years ago we used to think that in this direction the limit had been about reached, and com-

parison of a standard textbook of 1880, with that most recently published will show, however, how much further we have gone than we then expected to go. Considering the fact that no organ of the body is now exempt from attack, it would seem as though progress in the future must be rather in the direction of improvements in technic than in extension of surgical territory.

In the *brain*, for instance, I look especially for improvement in our treatment of hydrocephalus and of lesions of the hypophysis. In the *nervous system* there will doubtless be introduced better methods of attacking the so-called neuroses and painful affections of neural origin, *i. e.*, neuralgias. In nerve transplantation and nerve grafting we have not much more to expect than improvements in technical methods, while operation for tumors and compressive lesions of the spinal cord are even now as successful as diagnostic advances permit. It is a question whether success will ever crown operations for repair of a severed cord. Should our successors succeed in this, it would certainly seem as though the very acme of surgical endeavor had been attained.

Regarding the *heart*, and remembering that it has been many times intentionally punctured by the surgeon, as well as exposed and sutured for repairs of injuries, it would seem as if there were but little left for us to improve upon. It may be that Brunton's suggestion will find favor and that some division of stenotic heart valves will be made practicable, yet concerning these I confess my own skepticism. Possibly something may be done in the matter of so-called heart-block, but not if the anti-vivisectionists have their way, since this would be a matter to be laboriously worked out in the surgical laboratory.

The surgery of the *bloodvessels* will in the future include much freer use of sutures and performance of anastomoses. Doubtless, reversals of circulation will come into play, since Carrel has already shown how perfectly they may be accomplished in animals. I have permitted my mind to perhaps wander a little and to wonder whether it would ever be practicable to connect up the carotid and the subclavian vessels, or possibly the axillary by dividing the carotid as high as possible and then carrying its end over to the subclavian in order to shunt the blood current around some intervening lesion; or whether the saphenous vein and the femoral artery might be in some way interchanged for some similar purpose.

This leads to the consideration of still more radical and, at present, more startling possibilities with regard to the *transplantation of tissues and organs* from animals to man, or even from man to man. Carrel and his co-workers have recently introduced such innovations in this direction that it is hard to

predict a limit to their usefulness. Thus as showing what may be done, let me remind you of the dog into whose neck he transplanted the heart of another dog, connecting the aorta with the carotid, and the vena cava with the jugular, thus demonstrating the astonishing anomaly of an animal with two hearts beating at different rates; it would be hard to imagine anything of its kind more radical than this. But quite within the limit of human possibilities is the transplantation of a thyroid and perhaps of a kidney.

In animals, also Carrel has demonstrated the feasibility of *transplantation of an entire limb*, vessel being united to vessel, nerve to nerve, with equally careful suture of all of other tissues, and a resulting remarkable function of the new limb. He has suggested that in the human being it would possibly be practicable to apply this new method in the case of a forearm or even an arm. If so, it would far exceed, as a radical procedure, the cineplastic amputation of Vanghetti, who has recently left the tendons hanging out from the stump resulting from an arm amputation, and has later attached them to an artificial hand and forearm in such a way as to secure much more perfect control of the mechanical fingers and hand. (Illustrated on page 1048 of my "Modern Surgery.") While I have seen some of Carrel's work, and believe in it, I only know of this last procedure from the descriptions in the Italian journals. But no matter what the outcome of Carrel's work, he has already startled the surgical world with what he has shown to be practicable and of great value. It would be the greatest pity were such work as his to be stopped by any fanatic anti-vivisectionist.

We have yet very much to learn and appropriate to ourselves concerning the *ductless glands*, the hypophysis, the thymus, thyroid, tonsils and adrenals, and we might almost include the bone marrow in this list; their relations to obscure and chronic conditions, which eventually come under the surgeon's consideration, make every advance in our knowledge concerning them of importance to ourselves. Only recently have we learned to what extent their imperfect function may disable the later body welfare. The question of removal of ovaries, for instance, or of the need for transplanting them, is directly connected with these various organs, and such obscure conditions as the status lymphaticus, with all its possibilities of danger, with or without operation, are inseparably connected therewith. Various internal conditions hinder us largely in some of the work which we might otherwise carry out—namely, their inaccessibility, and the internal arrangement of their bloodvessels which make even satisfactory readjustment next to impossible.

Regarding the improved surgery of the *lungs* there is yet a

field for considerable advance. Since certain Italian investigators have virtually abandoned their practice of exsection of portions of the lungs, this procedure has fallen into almost complete shadow, and yet there is more present reason than ever for experiments in this direction. Now that opening the thorax has been shown not to be such a formidable procedure as it was formally considered, there seems to be ample justification for removal of a portion of a lung, either for malignant disease, for tuberculosis, or some other and extremely rare condition, providing only that the morbid process is limited within reasonably strict boundaries. In Italy, this measure dropped into disfavor some twenty-five years ago after one of the Italian surgeons who had demonstrated, as did I for myself about the same time, the large percentage of success which followed removal of a portion of the lung in dogs. Completely satisfied by these results he removed the apex of the left lung of his fiancée because of localised tubercular disease. Her death so upset him that he committed suicide, and it seems to have discouraged others as well, so that we seem to have heard of nothing of this character in very late years. Notwithstanding his sad experience, there is a field open in this direction, in which I am inclined to think the more adventuresome surgeons will work again.

More promising and less hazardous, although in appearance more formidable, is the method of Friedreich, of Marburg, who has lately apparently been curing certain cases of tubercular disease confined to one lung by producing an artificial stasis by compression, removing for the purpose practically all the ribs on one side, and permitting compression of the enclosed lung by atmospheric pressure. For this purpose he raises a "U" shaped flap from the entire side of the thorax and then removes the ribs subperiosteally without opening the pleural cavity. And he has had a degree of success which stamps the procedure as being justifiable and hopeful providing only that the disease is limited.

All of which raises the question concerning the utility of the pneumatic cabinet in these extensive operations where the thorax is opened. In thoracotomy it is theoretically advantageous; in actual practice, however, it is scarcely indicated, and will probably never come into general use, not at least in its present form; moreover, it has been shown that it is not a necessity, and that if any apparatus be required it can be found in some simpler form such as was employed in Buffalo, first by Professor Dalton, and later by Dr. Fell. It is quite possible to make this in such form and to so use it as to accomplish all that is done with the cabinet, and in a vastly simplified manner.

Turning our attention next to the *abdomen*, and speaking

first of the stomach, we may say that what may be accomplished in the future with this organ will depend in large measure on what improvements are made in diagnosis. It would also seem as if the technic of stomach operations were now practically complete, since formally cumbersome methods have been simplified, and novelties can only be introduced when dealing with some most rare or peculiar condition. While it has been shown to be possible to reach the esophagus through the posterior mediastinum, by a rib resection near the spine, and while it has been proposed to make a practically artificial esophagus, or to externalise it, the cases which demand such measures, or the men who are competent to perform them, will be each exceedingly rare. Therefore what we most need now is not so much technical improvements as an opportunity to apply our present technic at a much earlier period than has hitherto been possible. Did time permit I would like to digress and insert a plea for early exploration in cases of suspected gastric ulcer and cancer; especially in the latter is early diagnosis particularly at fault or impossible, and by the time it has become easy the period of the surgeon's possible usefulness has too frequently passed; hence my plea that a suspicion of gastric carcinoma, or for that matter of any internal cancer, not only justifies but should make imperative an early operation, first for diagnostic purposes, and secondly, in order that radical measures may be carried out at a time when there is about them something of real promise.

All that has been said of the stomach is virtually true of the *intestines*, and to speak further of them here would be simply to reiterate.

With regard to the *urinary organs* there is still much to accomplish, including always improvements in diagnosis. The ideal operation for movable kidney is perhaps yet to be made known to us, and the question of nephrotomy or nephrectomy in tubercular lesions is still discussed by many, although for my own part I do not hesitate to advise the latter as the better of the two. Capsulotomy for Bright's disease is still under discussion. It has suffered from this feature that the physician will scarcely ever turn his patient over to the surgeon for this purpose until it is far too late. Here, as in many another way, surgery has suffered in reputation because the right thing has been done at the wrong time, *i. e.*, too late; this has led the laity into prejudice against operative intervention, a prejudice quite undeserved, and made to redound to our discredit. For my own part I believe in incision and removal of the capsule, and to such an extent that I practically do it in every operation upon the kidney. It offers much by mere relief of tension, and consequently of pain and improvement of function, while there can

be no surgical objection to it. As to the matter of what it may accomplish beyond this, I do not care to enter into discussion at this time. There is apparent opportunity for transplantation, and it would not be at all surprising to see this measure placed upon a sound footing within the next twenty-five years.

With the *ureters* much is yet to be accomplished, partly in the nature of their diversion for various purposes, and partly in the nature of operation for their intrinsic diseases. Thus they have been frequently diverted into the rectum for ectopia of bladder, into the vagina, or out upon the back, as suggested by Watson, while I have myself grafted them into the appendix. Regarding all, or nearly all of these operations, we need and shall gain clearer indications and improved methods.

Concerning the *bladder* we may look especially for those improved methods which we sadly need in treating extroversion or ectopia, concerning which it may be said that there is scarcely any condition susceptible to surgical treatment which needs it more and promises less than this particular *bête noir* of the surgeon. It seems to me that externalisation will be more frequently performed than has hitherto been the case. And I look forward, also, to improved methods and more frequent performance of partial or even complete exsection of the urinary bladder.

The *prostate* is at present the field of great activity among the surgeons. What is especially needed now is such a popularisation of its exsection as to lead to its more popular and earlier resort. I look, also, for a final recognition of the superior advantages of the suprapubic method of removing it, save in those instances where the indications are clearly in favor of the lower route. I hardly need say much here about the *female pelvic organs*, save, perhaps, to express a hope that the future will show a diminished number of operations because of disturbances therein, but we do very much need a clearer recognition regarding, especially, the functions of the ovary, and in this respect I might include also the testicles, because their influence upon nutrition is as positive as it is yet ill understood. Transplantation of the testicles has not yet come into vogue, but transplantation of the ovaries has been shown to be practicable and even remarkably successful. Certainly in the next quarter of a century, experimenters should settle the question whether it be practicable to transplant into any convenient portion of the body the testicles either of animals or man, and not only to thus remove them but to preserve their function. This question once experimentally and favorably settled, practical application will find an ample sphere of usefulness.

My time is short and I will but allude to possible improvements in *orthopedics*, and the surgery of *bones and joints*. We

need more positive indications for operations upon the spine, whether the cutting methods or the bloodless operations of Calot be considered. These may be regarded as scarcely emerged from the experimental stage, but operations for various paralytic deformities are now upon such a firm basis that what is needed is mainly the spread of knowledge concerning their value. These operations at present are mainly practised by a limited number of expert orthopedists, and by a few general surgeons. Cases demanding them are, however, so numerous, that they need to be popularised, and this will surely happen within the next twenty-five years. During this period also may be yet looked for improvements in the surgery of the tendons, and particularly of the muscles; preceding or along with these will be also a better realisation of processes of repair and complete restoration of function in these tissues. Moreover, along with all the tendon surgery will come an appreciation of the benefits to be gained in certain cases by nerve transplantation and nerve grafting.

We may expect, also, certain improvements in our operations upon the *joints*, especially in the nature of securing motion after excisions. And we may anxiously look for, and with reasonable confidence expect, enlargement of our knowledge of the infectious arthritides, and in repairing or atoning for their disturbing consequences.

Once more I must beg you to realise the difficulties before the man who aspires to play the rôle of prophet, and to be lenient in your judgment on such prophecies as I have permitted myself tonight to make. But there is one final consideration, which concerns the welfare of the entire profession, upon which I do not hesitate to speak with positive convictions, and to the following effect. The whole aspect of the practice of surgery twenty-five years from now will depend upon our management of the two greatest dangers which at present menace it, and without going into detail or saying anything more concerning this, upon which I feel very deeply, I would simply lay them before you. The first of these dangers comes from incompetence and *too much eagerness* on the part of those who essay to do surgical work, and the second comes from a *lowering of professional standards*; the *introduction into our science and art of debasing principles of commercialism*. And in this I name especially the system of spoils or graft, or whatever you like to call it, which is usually spoken of in lighter terms as division of fees. Let us hope that standards in both these directions will be raised rather than lowered, and let us hope that higher aspirations and determination for improvement will dominate and triumph in the end.

Radical Operation for the Cure of Incipient Hip-joint Disease—Report of Case.¹

By H. C. ROOTH, M. D.

Clinical Instructor in Surgery, University of Buffalo, Surgeon Riverside Hospital.

AS tubercular coxitis is comparatively common in children, especially among the poorer classes and in tenement districts, any method that will hasten recovery, without incurring too great a risk, should receive our serious attention.

The usual treatment employed requires from one to two or three years to effect a cure, and even then deformity or perhaps ankylosis of the hip may remain.

While the treatment in most common use, such as tonics, weight and pulley, splints, plaster dressings, crutches, and the like, yields excellent results in many cases, if intelligently employed, yet the time required and the expense attached to so long a period of treatment become a great burden.

If the diseased focus or foci can be removed by operation, we can spare our patients many months of suffering and invalidism, and I am sure that in selected cases this can be done.

Five years ago Dr. Herman Mynter returned from Copenhagen enthusiastic over the results which were being obtained there in cases of incipient hip-joint disease, which were treated by trephining the neck of the femur through the trochanter major and thereby removing the diseased area.

This method was quite popular some years ago, but owing to the fact that the disease is not always confined to the neck, or even to the epiphysis, the affected areas were not always removed, and consequently the results were at times disappointing. Since the introduction of the x-ray, however, this objection, it seems to me, has lost its weight, for we can determine quite accurately the seat or location of the disease, and therefore can select our cases intelligently.

I cannot see why a tuberculous focus located in the neck of the femur should not be removed with the same promptness as we remove the same disease if located in other accessible parts of the body.

The case I wish to report is as follows:

T. S., female, age 6 years, first seen by me September 1, 1903. Early in the spring of this year she began to complain of pain in her right hip and showed a slight limp. There was some spasm of muscles and other symptoms of hip-joint trouble. She was seen at this time by Dr. J. C. Thompson, who prescribed tonics and rest and had her taken to the country. Under this treatment

1. Read at the meeting of the Medical Society of the County of Erie, April 20, 1908

she improved and all of her symptoms disappeared. She remained apparently cured until two weeks before I saw her (four months) when the doctor was again consulted on account of a return of her former symptoms, only in a much more severe and acute form. He then made an x-ray examination and located a spot in the neck of the femur, inner third, which showed marked signs of softening.

At this time she was referred to me, and I advised radical operation for the removal of the diseased focus. She then consulted one of our leading orthopedic surgeons, who advised against operation and had her removed to a hospital and placed in bed with weight and pulley. She remained there two days and then returned to me for operation. On September 4, 1903, assisted by Dr. Thompson, I exposed the hip-joint and trephined through the neck of the femur from the great trochanter to the head, but not through it. The size of the trephine was one-half inch. Then with a sharp spoon this canal was curetted and the instrument soon broke through the neck at the point of disease, as indicated by the x-ray. This was soft and easily removed, leaving a hole about three-quarters of an inch in diameter. The joint was then thoroughly washed and the capsule sewed with catgut sutures, and the wound closed without drainage. A plaster-of-paris splint was applied and she was placed in bed with slight traction on the limb. This splint was removed in two weeks, at which time the wound was entirely healed. Another splint was applied and allowed to remain two weeks more, the slight traction being continued. At this time the leg could be handled and fully flexed on the body without pain, and all spasm of muscles had disappeared. By October 24, or seven weeks after the operation, she was up and using the leg for two hours each day, and in ten weeks was well. At this time, through the courtesy of Dr. Park, I presented the patient at a meeting of the American Surgical Society. It is now five years since the operation and she has remained in perfect health since that time.

It would seem from the result obtained in this case that this form of treatment deserves more attention than it has been receiving in the last few years.

350 ASHLAND AVENUE.

The International Congress of Surgeons, 1908.

By EDGAR R. MCGUIRE, M. D.

Associate Surgeon, Buffalo General Hospital.

THE first meeting of the International Congress of Surgeons was held in Brussels, 1905. It is an organisation of representative surgeons from every country, America having about sixty members. Meetings are held every three years. Professor Kocher of Bern, was the first president; Professor Czerny of

Heidelberg, was next, and Professor Lucas-Championiere, Paris, the present one. The executive committee is made up of one member from each country and it forms the governing body. Dr. Roswell Park, of Buffalo, has been the American member of this committee since the organization of the society.

The second meeting was also held in Brussels, which is in many respects an ideal location for such a meeting. It is centrally located, well equipped with clinical facilities, so essential for such a meeting, and has several buildings admirably adapted for so large a gathering as the Congress brings. The meeting was held in one of the buildings recently erected for the International Exposition, to be held in 1910.

A large part of the building was given to the exhibition of surgical instruments. Almost every important manufacturer in the world had an exhibit, making this a decided feature. There was also a large cancer exhibit where gross specimens of almost every conceivable malignant lesion were shown. These were arranged so that sections could be seen of any specimen.

There was a first class café in the building, so that most of the members remained all day, taking lunch in the building.

The program was divided into five main subjects: (1) symposium on cancer; (2) surgery of the liver and biliary passages; (3) anesthesia; (4) surgery of the spine; (5) hernia.

A glance at the complete program will readily convince one of the interest of such a meeting. Seldom has one the opportunity to see so many men of international reputation in one room, discussing the same subject.

Following is a brief outline of the program:

TREATMENT OF CARCINOMA.

- I. Report on the nature of the cancerous process, by Professor Roswell Park.
- II. Report on the pathogeny of epithelioma, by Dr. A. Delbet; on the pathogeny of cancer, by Dr. Girard.
- III. Report on the treatment of cancer of the lips, by Dr. von Bonsdorff.
- IV. Report on cancer of the mouth and tongue, by Prof. J. Collins Warren.
- V. Report on treatment of nasopharyngeal and laryngeal cancer, by Dr. Glück: systematic ablation of the naso-pharynx, by Dr. Durant.
- VI. Report on the treatment of carcinoma of the esophagus, stomach, liver, biliary ducts, pancreas and peritoneum, by Prof. Czerny. (1) results of twenty gastrectomies for carcinoma of the stomach, by Dr. Derujinski; (2) conditions favorable for excision in cancer of the small curvature of the stomach, by Dr. H. Delagenière; (3) surgical treatment of carcinoma of the liver, by Dr. P. Peugniez; (4) carcinoma of the pancreas, by Dr. Verhoef; (5) primary sarcoma of the spleen, by Dr. d'Arcy Power.
- VII. Report on the treatment

of cancer of the intestine, by Prof. Voelcker; Carcinoma of the rectum with early vesical troubles, by Dr. Ch. Girard. VIII. Report on the treatment of uterine cancer, by Dr. J. L. Faure: (1) carcinoma of female genital organs; carcinoma of the uterus, by Dr. Delétrez; (2) carcinoma of female genital organs. Uterine cancers, by Dr. Jacobs; (3) end-results of operations for uterine cancer, by Dr. Wertheim. IX. Report on the treatment of cancer of the genitourinary organs, by Dr. Leguen. X. Report on the treatment of epithelioma of the skin, by Dr. Morestin. XI. Report on the treatment of carcinoma of the breast, by Prof. A. Depage. (1) carcinoma of the breast by Dr. Delétrez; (2) carcinoma of the breast, by Dr. Steinthal; (3) treatment of carcinoma of the breast, by Dr. Vanverts. XII. Report on carcinoma of the renal capsule, by Dr. Tavel. XIII. Report on the treatment of cancer by radio- and radium-therapy, by Prof. Sequeira; on the value of fulguration in the treatment of carcinoma, by Prof. H. Reynes. XIV. Report on the treatment of inoperable cancer, by Henry Morris: (1) treatment of inoperable uterine carcinoma by Dr. Delétrez; (2) palliative treatment of inoperable cancer, by Dr. Lovell Drage. XV. Report on end-results of surgical treatment of cancer, by Prof. Dollinger; operative results in carcinoma, by Dr. Korteweg.

SURGERY OF THE LIVER AND BILIARY DUCTS.

I. Report on lithiasis, by Prof. Kehr: (1) usefulness of the gradual section of the ducts in operations for lithiasis; its indications, by Dr. H. Delagenière; (2) on the surgery of the biliary ducts, by Dr. J. Bakès; (3) on the perforation of the gall-bladder, by Dr. Max Sträter; (4) on gallstones, by Dr. Steinthal. II. Report on surgical treatment of cirrhoses of the liver, by Dr. Koch; surgical treatment of the cirrhosis of the liver, by Dr. P. Peugniez. III. Report on treatment of angiocholitis, by Prof. Quénu and Dr. Duval. IV. Report on treatment of abscesses of the liver, by Dr. Legrand. V. Report on abscesses of the liver, by Dr. Voronoff. VI. Report on treatment of tumors of the liver, by Prof. Payr.

ANESTHESIA.

I. Report on general anesthesia, by Prof. Vallas: (1) on the mixed-narcosis with ethylchlorid and oxygen, by Dr. G. Lotheissen; (2) technics and indications of the ether-narcosis, by Prof. J. L. Reverdin and Ch. J. Bergalonne; (3) on mixed-narcosis with scopolamin-morphin and chloroform, by Drs. Rouffart and Walravens. II. Report on medullary anesthesia, by Prof. Rehn; results of 1,650 cases of medullary anesthesia, by Dr. Fr. Zahradnický. III. Report on local anesthesia, by Dr. Mac

Arthur: (1) local anesthesia, by Dr. F. Moty; (2) endoneural anesthesia of the limbs, by Dr. Alexis von Hintz.

SURGERY OF THE SPINE.

- I. Report on traumatisms of the spine, by Prof. de Quervain.
 II. Report on tumors of the spine, by Prof. Berard; tumor of spinal cord.—Operation.—Radical cure, by Dr. McCosh.

HERNIA.

- I. Report on etiology of hernia, by Prof. Forgue; etiology of hernia, by Dr. William Sheen. II. Report on inguinal hernia, by Dr. Alessandri: (1) the inguinal hernias in adults, by Dr. F. Moty; (2) on 7,000 operations for inguinal hernia, by Dr. Petrovitch; (3) treatment of the sac in Bassini's operation, by Dr. V. Subbotitch; (4) operative procedures for inguinal hernia, by Dr. J. Vanverts. III. Report on crural hernia, by Dr. Hildebrand: (1) operation for crural hernia, by Dr. G. Lotheissen; (2) radical cure of crural hernia by the procedure of the "double curtain" (*procédé du double rideau*), by Dr. Léon Bérard; (3) treatment of crural hernia, by Dr. J. Vanverts. IV. report on umbilical hernia, by Prof. Fraenkel. V. Report on hernia in children, by Dr. J. Lorthioir; early interference for umbilical congenital embryonic hernia, by Dr. Nove-Josserand. VI. Report on operative procedures and end-results of the radical cure of hernia, by Prof. Kalliontzis; operative procedures for treatment of hernia, by Dr. Verhoef.

Abstracts of each paper, limited to fifteen minutes each were read. The entire papers are to appear later in the published transactions of the society. The discussions were very valuable, as every one seemed to express himself perfectly freely. This feature was illustrated in Mr. Moynihan's discussion of Professor Kehr's paper on gallstone disease. Mr. Moynihan said it was seldom his privilege to hear and see such an array of material and figures as Kehr had presented and still be compelled to disagree in almost every particular. This discussion especially pleased the American members, as Mr. Moynihan's advanced position was in complete accord with their views. He maintained in part that gallstones always caused symptoms if we could but recognise them; that medical treatment might relieve symptoms but failed to influence the pathology of the disease; that if we were to avoid the experience of Kehr, who confessed he was compelled to operate most of his cases in the late stages of contracted gall-bladder, duct stone, jaundice, pancreatic disease, and the like, we must recognise the condition early and then proceed with surgical relief.

The social features formed a very delightful part of the meeting. Formal dinners were given every evening, usually more

than one each evening, where one might see from fifty to one hundred guests at table in a private home. Without proper attention to details, I can imagine that such a dinner might prove very monotonous. If, for instance, one were limited to English in his conversation and one's immediate neighbors at the dinner spoke Russian on one hand and perhaps Italian on the other, conversation might somewhat resemble that of deaf mutes.

One of the most valuable features of such a congress consists in meeting so many famous men together. To see and hear them discuss papers gives one a better acquaintance than years of reading could possibly do.

There seemed to be a very earnest desire to have the next meeting in America. It was thought wise, however, on account of the youth of the organisation, to remain in Europe, and Brussels was again chosen as the meeting place for 1911.

Our trip gave us an opportunity of seeing at close range the condition of the average American student in Europe.

There is prevalent in America an entirely erroneous idea as to the relative merits of European and American surgery. From the time I began the study of medicine I heard of the wonders of the old world in matters pertaining to medicine and surgery. Some of my friends returning from study in Europe brought back wondrous tales of foreign surgery. It is high time to reverse such opinions, for the best surgery in the world today is done in America.

There are many places in Europe where one may see most excellent work, and a visit to such places is well worth while; but for the recent graduate to go to Europe to study surgery is exceedingly unwise.

It is really a pitiable sight to see fifty or more young Americans in Berlin struggling with the difficulties of a foreign language, taking courses in surgery, trying to see work here and there, when at home they could see better work and just as much of it with infinitely less inconvenience and expense.

The value of a European trip is inestimable. The refining influence of travel, the historic scenes, the beautiful galleries, the insight into the life of each of the great cities, the acquirement of languages, all constitute advantages not to be had at home. But let us have a true estimate of the surgery of our own country. When Europeans fully realise the high character of the surgical work done in America, travel will be in the other direction. The place to study surgery today is in America.

The Effect of High Frequency Currents upon Blood Pressure. Demonstration of the D'Arsonval Cage.¹

By W. L. CONKLIN, M. D., Dansville N. Y.

LAST summer I had under my care a patient sixty-three years of age who was suffering from that not infrequent pathological combination, damaged kidneys, heart and arteries. When she came to the Jackson Health Resort in June, she was recovering from a sharp attack of bronchitis, dyspnea being marked on the least exertion, and with a blood pressure of 225 the outlook was not very good. With absolute rest in bed for some time, limited diet, a long course of Schott baths, massage, and the usual medication she did very well and returned to her home in November much improved. Last spring I learned that after some slight overexertion she became suddenly worse and died in a few days.

My patient was extremely fond of music and in many other ways well equipped for years more of useful and happy life. I have gone thus into detail regarding her case because it is typical of a large class of patients suffering from this pathological trinity so likely to terminate life years before its period of usefulness would otherwise be ended.

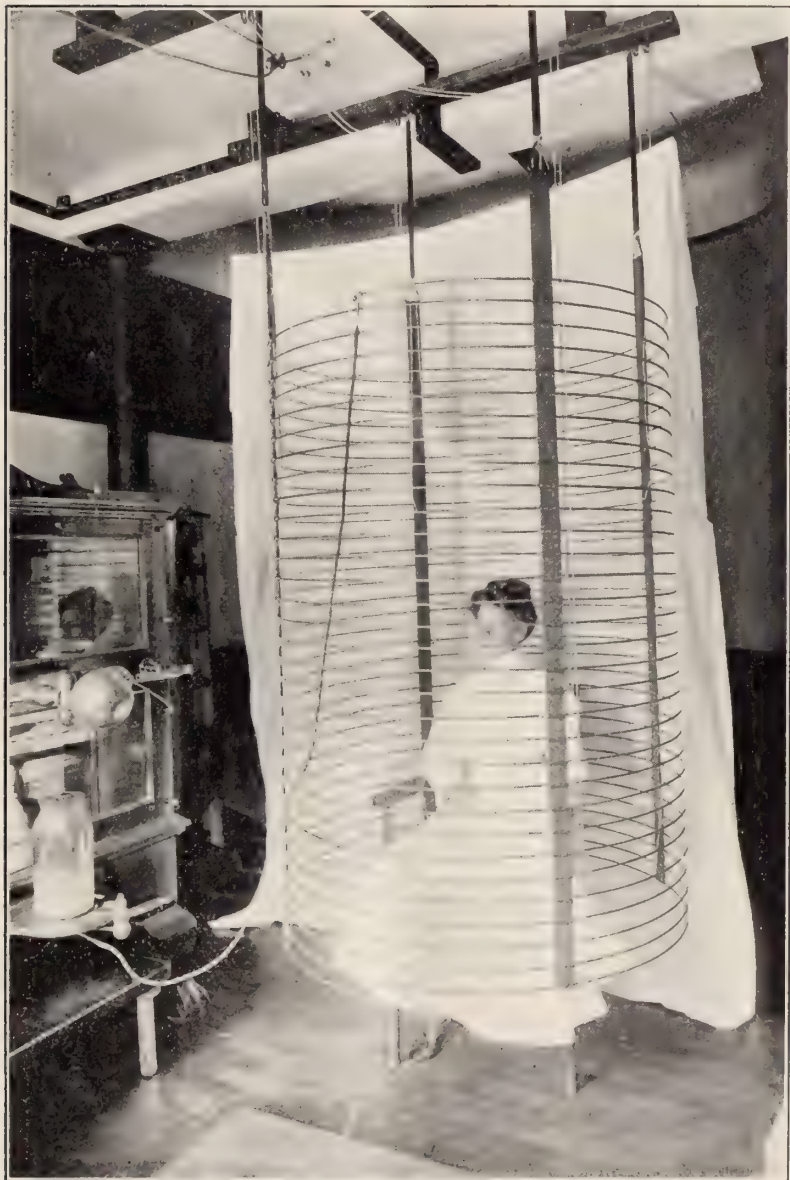
No doubt great advance has been made in the management of this condition, resulting from a better knowledge of its causes, but there is still room for improvement, and it is for this reason that I call your attention to a method of treating high arterial tension which, though not as yet much in vogue, promises to be of value.

During the period the patient to whom I have referred remained at the Health Resort she called my attention to an article on the treatment of hypertension, which appeared in *L'Illustration*, June 22, 1907, and later made a translation for me. The article gave an account of the D'Arsonval cage treatment of high tension and unlike many effusions on medical subjects in the papers and magazines it was written with an evident consideration for the truth and not primarily to produce a sensation. I will quote from it the accurate and quaintly put definition of high blood pressure:

Hypertension is not in itself a malady, it is an indication, a warning, a state coming before, which it is well to recognise in time and interpret in order to combat the evil with which it will be followed if one does not administer a remedy.

After reading this article and a similar one in the *Scientific American*, and reflecting on my patient's expression of regret that the method of treatment which they described had been but little

1. Read at the forty-first annual meeting of the Medical Association of Central New York, held at Buffalo, October 27, 1908.



CONKLIN: D'ARSONVAL CAGE.

used in this country, I sought the aid of our superintendent, Mr. Croll, and he very kindly constructed a cage, somewhat after the D'Arsonval pattern, which has now been in use in the Jackson Health Resort since March 1, 1903.

We have all experienced difficulty in securing desired results in the treatment by the ordinary means of the class of cases in which high arterial tension occurs. We have all felt, too, I have no doubt, that even though this increased tension and arterial degeneration are only symptoms of trouble elsewhere, still it is very desirable to lessen the tension and thus save the arteries from undue strain and at the same time give them a chance to get into a more nearly normal condition.

Janeway says that blood pressure depends upon four factors: (1) energy of the heart; (2) peripheral resistance; (3) elasticity of arterial walls; (4) volume of circulating blood. There can be no question that while the blood pressure as measured by the sphygmomanometer is influenced by the degree of sclerosis, the reverse is also the case, and high tension has a tendency to produce or increase a condition of sclerosis.

Osler says, "There are four great factors in the causation of arteriosclerosis: (a) the normal wear and tear of life; (b) the acute infections; (c) the intoxications and (d) those combinations of circumstances which keep the blood tension high." He further says, "There can be no doubt that in many individuals the rise of blood pressure antedates the appearance of arteriosclerosis."

It is evident, then, that if arterial tension can be reduced and especially if that reduction can be made to a greater or less degree permanent, then we are rendering less potent one cause of arteriosclerosis, and at the same time combatting other abnormal conditions which are caused or aggravated by high blood pressure.

These results we have been able to secure, to a degree which is at least encouraging, by the use of the cage which I exhibit here to-day. It is so constructed that it may be drawn up toward the ceiling when not in use and is simply a large solenoid consisting of 32 coils of $\frac{1}{4}$ inch brass-plated rod. The coils are two inches apart and each is 12 feet long. This solenoid is attached at the upper and lower extremities of the spiral to two pairs of Leyden jars which are, in turn, attached to the poles of a static machine. If desired, the lower attachment may be with a metal plate underneath the platform on which the patient sits.

The *modus operandi* of D'Arsonvalisation, whether by means of the autoconduction cage or the autocondensation couch, is not yet very clearly understood. Dr. Herdman, of Ann Arbor, has made experiments with animals which throw some light upon the

subject and it is at least proven that one effect is to render more active the various processes of metabolism and elimination. For example, an increased elimination of urea is one of the results quite uniformly noticed. It may be that we shall find here a valuable method of treating that large class of cases of mental depression and even insanity due to faulty elimination. Thus far, at the Jackson Health Resort, the cage has been used mainly in the treatment of cases showing a blood pressure above normal.

The patient remains within the cage from fifteen to twenty minutes and is surrounded by an electrical atmosphere, so to speak, of high frequency and high potential; constituting the autoconduction treatment first advocated by D'Arsonval. The reduction of blood pressure in a fifteen-minute treatment is ordinarily from 4 to 10 mm. though as great a reduction as 15 mm. has been noted. The treatments are given from two to four times each week. The blood pressure was 170 in one case when the treatments were begun, April 6, and gradually fell to 135, where it has remained without change since the treatments were discontinued four weeks ago.

In another case there was an average drop of 8.7 mm. in ten treatments. Highest blood pressure noted 170, lowest 142. This lady had suffered for many years with periodic attacks of mental depression which seemed to be due to faulty elimination. Decided improvement in her condition was noticed after a few cage treatments had been given. One patient in whom the highest pressure noted was 146 mm. remains at about 125 mm. with one fifteen-minute treatment each week. The treatments have just been begun in a case in which the pressure is about 260. The arteries are very hard and thus far results have not been well marked.

I will not weary you with further detail but will only say in closing that while my experience with the D'Arsonval cage is not yet extensive I am strongly inclined to the belief that we have in it a valuable aid in the treatment of the various pathological conditions in which high blood pressure is an important factor.

Blastomycosis in New York State. A Question.¹

By HENRY CLAY BAUM, M. D., Syracuse N. Y.

SINCE attention has been directed to this disease, some cases crop up from time to time, that seem to compel the diagnosis of blastomycosis: this, too, in spite of the fact that we are not supposed to find the disease in New York state. The excuse for this article appearing on the program is the hope of determining whether one experience is exceptional, or if in truth

1. Read at the forty-first annual meeting of the Medical Association of Central New York, held at Buffalo, October 27, 1908.

the disease is really not so rare among us, but classed under other names by physicians seeing only occasionally cases of the rarer forms of skin diseases.

I did not recognise the first case and should not have been able to diagnose it, I fear. It was unmistakably an infection of a severe type, and through a suggestion received in a letter from Dr. J. C. Johnston, I was finally able to identify it. Dr. James Nevins Hyde of Chicago, has given this disease the intelligent study characteristic of his work, and furnishes a description, than which there is none clearer and more helpful, from which to quote:

Blastomycosis is a chronic, inflammatory, infectious disease, characterised by the appearance on the skin of a papule or papulopustule which becomes crusted and extends peripherally to form a sharply outlined, elevated verrucous patch, situated upon a pus infiltrated base and presenting a characteristic, abruptly sloping border in which are seen minute, deeply seated abscesses. Blastomycetes are found in the seropurulent contents of the abscesses, from which both budding and mycelial forms of the organism have been obtained in pure culture.

One is reluctant to stop here, for Dr. Hyde's description of the symptomatology and pathology is most instructive. Many others have contributed to the literature and scientific knowledge of this subject. Dr. Gilchrist, of Johns Hopkins, should be named, for having demonstrated the responsible organisms in a case which Duhring considered a scrofuloderm and for his repeated studies and contributions.

Many others are entitled to share the credit for bringing to light the facts concerning blastomycosis, but that is not germane to this paper. My first case occurred in the person of a colleague from a neighboring town. Although no longer practising medicine, he was able to give a very clear record of his case. The first lesion came on the dorsum of his right hand and gradually extended to the wrist and beyond, proximally, and to the first phalanx of each digit. A second lesion appeared on the right cheek, opposite the upper lip. A third lesion, size of a silver dollar, came back of his left ear, just in the hairy scalp.

Ultimately this lesion recovered so fully that even the hair grew again and no scarring is to be seen. The first lesion left his hand atrophic and weak and the scar is tense, glistening and thin, with dilated capillaries running through it, as in the cicatrices of burns. The scar of the lesion of the right cheek is much less conspicuous and might easily escape notice. Still a fourth lesion developed later, on the left ala nasi, and is not yet extinct, though an atrophic scar gives a pinched and wasted appearance to the healed portion while the characters of blastomycosis are found at parts of the extending border where the disease persists.

At one time there developed a somewhat generalised adenitis; and from the affected hand to the corresponding axilla was a chain of nodes of the size of pigeons' eggs, of the violaceous color of erythema nodosum, which were both tender and spontaneously painful. At this time the patient was marasmic, with sluggish intellectuation and seemed about to die. But he rallied under energetic treatment and is now able to attend to his occupations, although far from being a well man. Dr. Hyde saw this case and concurred in the diagnosis although none connected with the case had been able to find the organisms. Hyde also failed, after repeated efforts, without influencing his opinion as to the nature of the disease. Later on this case was presented at the Niagara Falls meeting of the American Dermatological Society and again identified by Dr. Hyde and others present familiar with the disease as blastomycosis. Fortunately, in the mean time, Dr. Adelaide Dutcher found the organisms in the secretion in the miliary abscesses and obtained pure cultures in both forms. Although using no different technic, but by the same identical methods which for many months had brought only negative results. The smears and cultures were shown with the case, which was the means of convincing some of those present, who, by the way, confessed that they had not previously seen a case of blastomycosis.

CASE II. Miss D., age 10, lesion on dorsal aspect of right leg. Recovered under x-rays and the iodide of potash, but relapsed some years later. At the time of her relapse she was living in another town. I have not seen her, she being treated by a colleague in her own town, but have been informed that the lesions were the same and recurred in the scar of the previous disease.

CASE III. Mrs. W., age 55, lesion on dorsum of right hand. Cleared up promptly under vigorous high frequency treatments, by vacuum electrode, and remains well.

CASE IV. Mrs. K., age 50, multiple lesions on right leg and thigh, with some few on left leg also, and two on the face. Recovered under local dressings of antiseptics and especially did well with an acidulated peptic solution applied continuously. Salicylate of mercury by mouth. No recurrence.

CASE V. Mr. H., age 18, lesion on dorsal aspect of right leg. Healed finally after a great variety of treatments, including x-rays, high frequency treatments, various local applications, of which the most satisfactory was equal parts of ichthyol, lanolin and vaseline. Internally iodide of potash in rather large dosage. There was no real gain in this case until the iodide was pushed. There has been no relapse.

Since that time several similar cases have been found in and about Syracuse apparently clinically identical with the first.

Some other cases have been left out of this group because of irregular and atypic features and because we have been unable to demonstrate the organism. Yet it is as difficult to exclude them as to classify them elsewhere. Writers on blastomycosis are apt to declare that the organisms are easily found. Usually, perhaps this is true. Some observers have stated that they only found the organisms after patient and repeated attempts. Certainly it was only after months of failures that the organisms were found in the first case here reported: which, if the asserted easy demonstration is a constant and dependable character should have excluded it from its proper classification.

In conclusion, it seems possible that these cases are not so infrequent in New York state as they have been thought. That even as Duhring thought his case a scrofuloderm, so may others regard an occasional case. Or, it might be confused with a syphilide, tuberculide, ringworm or even an eczema. In differentiating, it should be kept in mind that the organisms may prove elusive.

809 UNIVERSITY BLOCK.

The Nitrites and their Action upon Hypertension

[*The Hospital*, May 1, 1909.]

THE exact extent, duration, dosage, and other points of therapeutic importance in the action of various vasodilator drugs in common use have been very carefully studied by Dr. E. Matthew, who has lately published his conclusions in a contemporary. The author remarks that no extended series of observations upon the blood pressure of patients to whom these drugs are exhibited has been published in which accurate manometric records have been taken.

It is to be emphasised that, within limits, high blood pressure is not necessarily harmful to the patient in whom it exists; it is primarily a compensatory change, which may or may not achieve results of value to the economy, though, unfortunately it is found often to tend to be progressive and ultimately harmful. The indications for and against interference with hypertension have not yet been worked out; but when in any given case it seems advisable to attempt by drugs to reduce an abnormally high blood pressure, it will be found best to rest content with a measure of success which still leaves the patient with a higher pressure than is usual in health. That is to say, a reduction of about 30 mm. of mercury gives better results in the relief of symptoms than any greater diminution will do, even when the original pressure is 80 or 100 mm. in excess of the normal maximum.

Again, it is a matter of common experience among physicians who prescribe nitrites or other vaso-dilators that there are great variations in the rapidity with which the different drugs produce an effect, and still greater variations in the length of time during which the effects last. For angina pectoris, asthma, and spasmodic conditions generally, where a rapid and considerable action is required, amyl nitrite is the dilator *par excellence*; its action, though transient, is both immediate and powerful, and its diffusibility insures its efficient absorption. As for the nitrites, which are given in the hope of securing a more prolonged vaso-dilatation, nitro-glycerine is the most rapid. The pharmacopeial preparation of this is liquor trinitrini, and its official dose is one to two minims. The latter quantity produces in most cases of hypertension a fall of pressure which begins always within ninety seconds, generally within a minute. The maximum fall is reached at the end of four and a half minutes, and is about 28 mm. of mercury; the subsequent rise is slower than the fall, but in all cases the effect of the drug passes off within half an hour. Further, nitroglycerine itself, given in tabloid form, has no action whatever of any sort; it is to be supposed that the tabloids are either pharmacologically inert, or that they remain undissolved.

The next most rapid in action are the nitrites of sodium and potassium, whose freshly prepared solutions are given in doses containing two or three grains. The onset of dilatation, judging by the manometric reading, occurs in about five minutes; the maximum fall averages 32 mm., is complete in fourteen minutes, and is maintained for forty or fifty minutes; the natural level is reached about two hours after administration. It is found that such a dose given three times a day will keep the pressure down, not constantly at the lowest level of a single dose, but quite markedly. Tolerance is, apparently, not established, whereas with liquor trinitrini the patient will gradually respond only to larger and larger doses up to 60 minims or more.

Erythrol tetranitrate and mannitol hexanitrate are slower and more persistent still. The former was given in two proprietary forms, one of which (Martindale's) acted quite satisfactorily, whereas the other had not the slightest effect. Erythrol tetranitrate in half-grain and one-grain doses begins to act in five and a half minutes, and produces its maximum result in twenty-two minutes; mannitol hexanitrate (one grain) in twelve and a hundred minutes respectively. Both produce about the same degree of fall, namely, 35 mm.; both maintain their full effect for one to two hours, and do not cease to act altogether for five or six hours. There is no tendency to the establishment of tolerance; a dose of half to one grain will secure permanently a fall

of about 30 mm. if given thrice daily. These two drugs are not so well borne as the inorganic nitrites; occasionally severe symptoms of over-action, probably due to individual susceptibility, are caused. Lastly, cobalto-nitrite of potassium, which has been employed chiefly in America, was tested. It is apparently quite inert, and has no vaso-dilator action at all.

It is worthy of note that Dr. Mathew finds some patients with marked hypertension who fail to respond to vaso-dilator drugs, or respond but very slightly. There are others in whom even an actual rise of blood pressure is produced; such patients are the subjects of advanced chronic inflammatory nephritis or arteriosclerosis, and in the earlier stages of their disease they respond to medication in the usual way. In cardiac and renal cases in which edema is marked the nitrites may also prove disappointing; after the edema has cleared up the usual vaso-dilator action may reappear.

The knowledge gained by this extremely careful and painstaking research places medical practitioners in possession of a much more trustworthy guide to the use of vaso-dilator drugs than they have hitherto had. It demonstrates the considerable advantages of ordering sodium and potassium nitrites instead of liquor trinitrini for persistent high tension, and the precise characters of erythrol and mannitol nitrites, drugs of which all students hear in their pharmacological lectures but few ever see administered. In view of the prevailing view that potassium salts depress the heart more than those of sodium, it is interesting to observe that Dr. Mathew can detect no difference in their reaction upon the blood pressure.

SOCIETY PROCEEDINGS.

The Medical Society of the County of Erie.

Regular Quarterly Meeting, April 19, 1909.

REPORTED BY FRANKLIN C. GRAM, M. D., Secretary.

ONE of the largest audiences, as well as one representing every branch of the medical profession, gathered at the University Club, on the evening of Monday, April 19, 1909, when the president, Dr. Charles A. Wall, at 9 o'clock, called the regular meeting of the Medical Society of the County of Erie to order.

The minutes of the regular meeting of the society held February 19, 1909, as well as the minutes of the meetings of the council held March 1, 1909, and April 5, 1909, were read by the secretary and approved.

The approval of these minutes also included the adoption of the action to confer honorary life membership upon Dr. Ernest Wende.

The treasurer, Dr. Lytle, reported that Dr. Roy G. Strong, whose membership had been dropped, had again fulfilled all the requirements of the by-laws and was, therefore, entitled to reinstatement, and on motion, Dr. Roy G. Strong was reinstated to active membership.

Dr. Thomas H. McKee, Chairman of the Committee on Membership, reported favorably upon the following applications for membership in the society, and on motion, they were duly elected: Edward M. Dooley, 406 Louisiana street; Myrtle A. Hoag, 426 Dearborn street; Frank B. Rasbach, 172 Allen street; Caroline Lichtenberg, 24 Orange street; Valentine A. Decot, 1099 Genesee street; Max Breuer, 33 Allen street; Joseph S. Lewis, 258 Elmwood avenue; Clara Anna March, 465 Ashland avenue; Wm. H. Mansperger, 1003 Main street; M. Louise Mallory, 14 Villa avenue; Hyatt Regester, 1106 Main street, all of Buffalo, and F. K. Armstrong, Eden Centre, N. Y.

Dr. Julius Ullman, Chairman of the Auditing Committee, reported that examination of the treasurer's books for the year 1908 showed them to be correct.

Dr. John H. Grant, Chairman of the Board of Censors, reported as follows:

January 18—Case against Lambert, practising medicine without a license—personating another practitioner and having in his possession a fake certificate. Indicted by Grand Jury on three counts. Plead guilty in Supreme Court and sentenced to six months' imprisonment in Erie County Penitentiary. Since sent to asylum for Criminal Insane at Matteawan.

January 27—F. G. O. Ehle, posing as the Ebenezer Medicine Company, was arrested for doing business without being registered in the Erie County Clerk's Office, and for practising medicine without a license. Found guilty of first offense in Police Court and fined \$5. Being a cripple in his hands, the acting Police Judge took sympathy on him; said the evidence in the practice of medicine was not conclusive and discharged Ehle with a warning.

January 27—One, J. W. Merrow, posing as the Atlantic Clinic, upstairs, No. 7 East Swan St., Buffalo, where he had set up elaborate offices under cover of one, Dr. Richard E. Hawken, a graduate of Toronto, and endorsed by New York Regents, and Dr. Winters, Detroit College of Medicine—1886, is now being investigated and to secure evidence toward having Hawken's and Winter's state license revoked for deceit in covering up the illegal practice of medicine. Merrow's case—a bad one—his license to practise in Maine was revoked for being

falsely procured; also in Ohio, where he served a term in the county prison for fraudulent use of the mails; and he was fined and ordered out of the State; at Syracuse, for practising without authority. He claimed, in Maine, to be a graduate of a medical college in Indianapolis, long since defunct, and on inquiry by the Main Board, the college building had been burned down and the records destroyed. Measures will be soon taken to present this case to the Regents, as regards Drs. Hawken and Winters, and the use of the mails by Merrow.

Since writing the above, the Atlantic Clinic, including Merrow, Hawken and Winters, have, like the Arabs in the night, silently stolen away. They have gone into new pastures among the green hills of Vermont. I have just located them there.

February 6—The case of one, C. G. Edwards, posing as the "Nature's Creation Remedy Company," at 316 Franklin Street, and now of 531 Brisbane Building, has been under observation. Your chairman caused a sickly looking young man (but really quite healthy), in company with a witness, to present himself to Edwards, and the young man was told by Edwards that he had "consumption" and that he could cure him in a short time.

"Nature's Creation" has been partially analyzed and may be said to consist of vegetable matters, such as burdock root and other roots that grow by the wayside, and iodide of potash.

March 20th, a warrant was sworn out for Edwards, and he was arraigned in the Police Court, March 20. Case adjourned to March 23d, on which date he was held to the Grand Jury under \$500 bond. The case has been heard recently before the Grand Jury and its verdict is awaited with some misgiving.

March 11—Recently the so-called "Vacuum Company" has been under investigation by the Post Office authorities, through the efforts of members of the board, and a fraud order against the concern was issued by the post office department: the wares advertised having been found wholly without efficacy in the cure of disease.

April—Strange to say, a man has been practising in Buffalo for 20 years without lawful registration—one, William Bell, of Cazenovia street. He has a diploma issued in 1889 by a Therapen-Electro College at Indianapolis, Ind. His case, at this writing, is before the Police Court. He has asked delay in the hope that the Regents may grant him an examination.

April 10—One, H. James Ince, who was convicted of performing abortions and sentenced in October, 1907, to one year in the penitentiary, has applied to be restored to practise under the medical law and a hearing was given before a committee of the State Board of Medical Examiners in this city on April 10, 1909. Your Board of Censors was represented at the hearing, and they strongly opposed this man's restoration to practise in New York, on the ground that his crimes covered a number of years (7 in all), and his period of probation was too short to determine the sincerity of his reformation.

This report of the Board of Censors was duly received, and the thanks of the society tendered to the board, and to Dr. Grant in particular, for the excellent showing.

After the regular business of the society had been disposed of, President Wall briefly stated that, at a previous meeting, the society had elected Dr. Henry Reed Hopkins an honorary life member in recognition of his forty years' service as a member of the Board of Censors. The society had likewise decided to make the presentation of this membership an event in its history. Various speakers had, therefore, been designated to accentuate some of Dr. Hopkins's many sided activities during his long professional career.

The first speaker of the evening was Dr. Charles G. Stockton, President of the Medical Society of the State of New York. Dr. Stockton said that while he was an interne in the Buffalo General Hospital, he had a little talk with Dr. Hopkins, who was then a visiting physician at that institution. Doubtless Dr. Hopkins had long forgotten the incident, but not so the speaker, who had profited by the friendly advice of a well trained mind given years ago. He referred to Dr. Hopkins's well known methods of doing things, which he compared to the flight of a meteor going through the skies regardless of the other heavenly bodies. If the doctor was satisfied as to the right or wrong of any question, it did not take him long to act. Policy nor personal consideration never entered the game. For this reason, there was probably no physician in Buffalo who had made more enemies. There was, likewise, no general practitioner in the state who was better known. He is an ex-president of the state society, and for years was one of its most active members. His activities regarding state medical legislation are matters of history. When a good medical bill required support, the good doctor was on hand, and when a vicious bill was up, the doctor was likewise at the fore, and he usually succeeded in convincing the committee by his sound, logical methods of reasoning. Dr. Stockton conveyed the greetings of the state society, and closed with personal expressions of sincere good will.

Dr. William Warren Potter, president of the New York State Board of Medical Examiners, gave a concise history of the medical legislation of the last quarter of a century which lead up to the present state licensing law. Coming from one who was intimately and continuously associated with this work from the beginning, his remarks were of exceeding interest. This law had its inception in the Medical Society of the County of Erie, and Dr. Hopkins was the originator and prime mover. Dr. Potter traced the various steps which the law underwent, the many different interests who opposed every move, the sometimes absurd concessions which had to be made by friends of the meas-

ures in order to get any kind of medical law on the statute books, the composition of the original licensing boards for regulars, homeopaths and eclectics, and the present single licensing board in which all "pathies" are finally represented. When the final record will be made, said Dr. Potter, the name of Dr. Henry Reed Hopkins will be found well near the topmost scroll on the roll of fame.

Dr. William C. Phelps, an ex-president of the society, and a fellow student with Dr. Hopkins, related some of the incidents of student days and early practice. The only time he had known the student Hopkins to fail was at the final examination for his degree, when his fellow students were surprised at his absence. Later, it was learned that, through no fault of his, he had not been born early enough to entitle him to admission. Dr. Phelps dwelt more on the humorous side of his friend's career.

Dr. Edward Clark, another ex-president of the society, and a former Health Officer of the City of Buffalo, briefly traced his acquaintance with Dr. Hopkins from the time when he first saw him as the chief censor whose endorsement was necessary for permission to enter the study of medicine, to the time when he assisted in fighting medical battles at home and at Albany.

Dr. DeLancey Rochester, in the course of very complimentary remarks, made one of the most important points, when he declared that a single act in Dr. Hopkins's career entitles him to immortality.

For years, the courts held different opinions as to what constitutes the practice of medicine. The celebrated Daniels's decision stood in the way of any material progress. Dr. Hopkins wrote the definition which clearly and concisely defines the practice of medicine, and this definition is incorporated in the medical law of 1907, thus depriving individual judges from making their own definitions.

Dr. P. W. Van Peyma, secretary of the Erie County Board of Midwifery Examiners, spoke of Dr. Hopkins's instrumentality in this direction in determining the qualification of midwives before being allowed to practise.

United States District Attorney John Lord O'Brian, paid tribute to the work of Dr. Hopkins in this community and also in the state at large. As attorney for the Erie County Medical Society, Mr. O'Brian had occasion to become intimately acquainted with Dr. Hopkins who, as Chairman of the Board of Censors, was never without a case for the attorney. Daily visits, or consultations by telephone were the rule. Nineteen abortionists were driven out of business at one time by the issuance of a government fraud order forbidding the use of mails.

Several abortionists were convicted, sentenced to imprisonment, and their license to practise cancelled. Other fakirs were

imprisoned or driven away. In spite of the Daniels's precedent, Dr. Hopkins gained his point. When Mr. O'Brian went to Albany, as a member of Assembly, he found that Dr. Hopkins was the best known and most feared physician to the State Legislature.

President Wall called Vice-president Cohen to the chair and, after making a few appropriate remarks, presented to Dr. Hopkins, on behalf of the society, a beautiful silver loving cup containing the following inscription:

HENRY REED HOPKINS, M. D.

1869—1909

From

THE MEDICAL SOCIETY OF THE COUNTY OF ERIE

A token of their respect and esteem and of his being made an honorary member.

In commemoration of forty years' service as a member of the Board of Censors.

Dr. Hopkins, in accepting the beautiful gift of the society, was visibly affected and, after briefly thanking the members, he addressed them as follows:

Mr. President and Fellows: Possibly you will pardon me if, in my attempted response to your kind utterances of this to me, ever memorable evening, there should appear a note of personality. You may, at least, depend upon my best efforts to keep the same from undue prominence.

However, when I remember the many nice things that you—Mr. President—and your several speakers have said, and recall my many failures and shortcomings concerning which you all have been most considerately silent, the provocation is distinctly in the direction not of an official response but rather of an appreciation, and that from a full heart.

I had the good fortune to have begun my medical education in 1865, near the middle of the century, and my medical fathers and teachers,—Pratt, Winnie, Moore, Hadley, Lee, White and Rochester,—were born near its beginning, so that from my teachers and from personal observation, I have some knowledge of the trend of the medical thought of the nineteenth century. It is not beneath the dignity of this occasion for me to remind you that the object, the trend of the medical thought of the twentieth century is quite different from that of the nineteenth century. That the paramount theme of the nineteenth century was the consideration of the individual, the diagnosis of his disease, the treatment of that disease, for the money there was in it.

The treatment of consumption, of scarlet fever, of typhoid fever by the allopathic system, by the homeopathic system, or by

the eclectic system, these with their innumerable varieties and variations were the themes of discussion and medical conversation. The direction of this was to the individual to cure him of his illness for money. On the other hand, the medical orientation of the twentieth century is not the individual, not even the family, but is the State,—that the State may keep its individuals well, may prevent suffering, loss of time, and death, from the most frequent and the most deadly of all the diseases,—the preventable diseases.

In the nineteenth century, we had diagnosis for treatment. In the twentieth century, we have diagnosis for prevention. This thought of the twentieth century may, at first, seem to be like turning from the west to the east, but in fact it is but the logical and natural growth of the study of the diseases of the individual the family, the town, the state.

This medical millenium of the twentieth century, the supreme vindication of the medical profession, when consumption, pneumonia, scarlet fever, diphtheria, typhoid fever and the other preventable diseases, will be as rare as are now rabies, smallpox and the plague, will come before the century is half over,—come within the lives of many of you who have the good fortune to work as long as I have worked.

The light of this medical millenium is already seen at Albany, and is guiding the policy of the State in medical legislation, as shown by the fact of State License for the practice of medicine, a revolution of enormous potentiality. State license was not born without pains and labor, and at that labor, the profession of Buffalo contributed a liberal proportion. From State license by three boards to State license by one board was again an instance of progress, not reorientation, and was in entire harmony with the medical evolution from the ideals of the nineteenth century to the vastly higher ideals of the twentieth century.

Those of you who have not given this subject much thought may consider what I have just said optimistic, beyond warrant and quite unreliable as a scientific statement, and I, therefore, beg such of you to calm your minds with the reflection that insight does give foresight; that God so made the world that foreknowledge is not only possible, but that foreknowledge may have scientific precision and accuracy. The man wise in mathematical principles does study the starry heavens, does learn the names of the different planets, does know their several sizes and weights, their several axial and orbital motions, their several distances from each other and from their common center, the sun, and can foretell their relative positions and eclipses years and centuries in the future, and that, to the day, the hour and the minute. By the similar operation of the mental faculties of observation and inference, the man learned in surgical principles does know something of the anatomy of the human body, something of the physico-chemistry of the different tissues and fluids of that body,—something of the life histories of some of the enemies of that body,—and from this knowledge he can and

does foreknow and foretell that when necessary he can with safety open the cavity of the knee, of the peritoneum, of the pleura, of the pericardium and of the pia mater.

In like manner, the hygienist, making use of those same priceless mental faculties,—observation and inference,—attains a clear vision of the achievements of preventive medicine of the future, and in that future, which many of you will live to enjoy, there will be no prominence in the list of causes of death of consumption, pneumonia, scarlet fever, diphtheria, typhoid fever or the other communicable diseases; that, just as typhus fever, the plague and smallpox—diseases which, for centuries, caused a majority of all the deaths,—are now, to most countries, mere matters of ancient history; so the historian of the closing years of this century will recount the interesting facts as to the disappearance of the chief causes of our present death-rate.

I have said that the insight of the hygienist makes this expectation legitimate and natural; and have only to add that this medical millenium, while it is the pride, is not the boast or the work of the hygienist, or any other specialist in medicine or in science. When this consummation, devoutly to be wished, comes to bless the earth, it will be seen to be the resultant of many discoveries as to the cause of disease, the perfection of many methods as to the prevention of disease, but above all other forces will rate the work of the little red schoolhouse on the hillside where our humble millions are taught those priceless lessons of the three R's (reading, riting and rithmetic) where intelligent public opinion is made possible, because medical convictions expressed and crystallised in health laws and health ordinances, only become effective when loyally supported and executed by intelligent public opinion.

That the State of New York may, in due time, enjoy this blessing, there must be in the state one medical profession, compact and effective in unity of organisation, of such preparedness as is only possible when its individual members are men of high ideals, inspired with the hope and expectation of great accomplishments in the field of preventive medicine.

I have the belief, nay more, the conviction, that aside from any complimentary or personal element in the proceedings of this meeting, this review of the official activities of your recent representatives can but act profitably, to widen our ideas of the purposes, the scope, the responsibility of our medical societies, to stimulate pride in our profession and its high and ennobling purposes. Should something like this be the result of our evening, you, Mr. President and speakers, will not have striven or spoken in vain.

At the conclusion of Dr. Hopkins's remarks, Dr. Stockton moved that Dr. Hopkins's address be embodied in full in the minutes of this meeting. Motion was adopted.

President Wall then declared the meeting adjourned, and an impromptu reception to Dr. Hopkins immediately followed, when

personal congratulations were tendered by the many physicians present.

A collation was served and, for a considerable period of time, the members remained in social intercourse.

ABSTRACT.

Excretion of Urotropin in Cerebrospinal Fluid; its Therapeutic Value in Meningitis.

By S. J. CROWE, M. D.

Hunterian Laboratory of Experimental Medicine; *Johns Hopkins Hospital Bulletin*, April, 1909.

In a prior publication the author reported a case with cerebrospinal fistula in which a fatal outcome was looked for, and in which at Dr. Cushing's suggestion, urotropin in large doses was given in the hope of its cerebrospinal excretion. The boy recovered; and this led to the writer's further studies. Thus in cases of chronic nephritis, brain tumor or hydrocephalus, when lumbar puncture was to be done, the patients were given a 10- or 15-grain dose of urotropin; the cerebrospinal fluid removed was tested by a modification of Hehner's test, and urotropin was invariably found present. A number of observations made showed that the drug may possibly be absorbed as readily by the rectum as when given by the mouth.

In some instances urotropin was not given till the cerebrospinal fluid was dripping steadily from the needle. By testing specimens every few minutes, the first appearance, maximum concentration and gradual disappearance of the drug could be followed. After a 15-grain dose, the maximum concentration generally appeared thirty minutes to one hour later.

To determine if the amounts which appeared in the cerebrospinal fluid were sufficient to exert decided bactericidal action, the fluid taken from the body was inoculated with organisms and the inhibitive effect noted. The tables and photographic plates incorporated in the paper show a striking antibacterial effect, namely a reduction in the number of colonies from about 30,000 to about 500 within 1 hour 50 min.

The effect of urotropin on meningitis in animals, produced by subdural inoculation with streptococci, was to defer or entirely prevent death.

Though there is no accurate method of determining the amount of urotropin in the fluids, the impression was gained, from the comparative color tests of cerebrospinal fluid and urine, that in the case of animals with meningitis a larger amount of urotropin appears in the cerebrospinal fluid than in the urine. If this be proved, it would suggest some selective action, possibly

through the agency of the leukocytes, which have the power of taking up urotropin, as Vindevogel (*Ann. Soc. Roy. Scienc. Med.*, Bruxelles, 1902, Vol. II) proved.

When the first dose of urotropin was given subsequent to inoculation of the animals, the infection was merely checked during the continuance of active therapy; as soon as the drug was withdrawn, the organisms began to multiply with a return of clinical symptoms. This is much the same experience as with urotropin in genitourinary infections, and is akin also to the author's experiences with the drug in biliary infections. Therefore the most marked therapeutic value of the drug seems for prophylaxis or at least in early infections.

During the past year it has become a routine measure in the Johns Hopkins Hospital to promptly administer urotropin to all patients with lesions, which are not infrequently followed by meningeal infection; and the complete absence of such complication in quite an extensive series of cases seems to fairly well establish the prophylactic importance of the drug. This series included a number of compound fractures of the skull, gunshot wounds of the head and cerebrospinal fistulas, the patients receiving 30 to 60 grains urotropin daily. It is also used prior to ventricular or lumbar puncture, when local conditions make possible the inoculation of the meninges with organisms from an infected skin; just so urotropin should be given before a first catheterisation or one done when urethral infection is present. Possibly, too, the drug may be wisely used in cases of extracranial infection when extension to the meninges is feared, as in infected scalp wounds, otitis media, suppuration of the cranial sinuses. Its use may be desirable also in elaborate spinal or cerebral operations.

The author summarises: (1) Urotropin, given by mouth, invariably appears in the cerebrospinal fluid. This fact has been demonstrated by a large number of observations on man, and is also true for dogs and rabbits; (2) The largest amount of urotropin is present in the cerebrospinal fluid from 30 to 60 minutes after ingestion of the drug; (3) after therapeutic doses, a sufficient amount of urotropin appears in the cerebrospinal fluid to exercise a decided inhibitory effect on the growth of organisms inoculated into this fluid after removal from the body; (4) following a subdural inoculation of dogs and rabbits with streptococci, 60 to 80 grains of urotropin a day, given under conditions which insure absorption, will markedly defer, and in some cases prevent, the onset of a fatal meningitis; (5) the prompt administration of urotropin is advised in all clinical cases in which meningitis is a possible complication, or even when meningeal infection has actually occurred.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR

WILLIAM WARREN POTTER, M. D.

All communications, whether of a literary or business nature, books for review and exchanges, should be addressed to the editor, 238 DELAWARE AVENUE, BUFFALO, N. Y.

VOL. LXIV.

JUNE, 1909.

No. II

State Educational Building

FOR several years past the need for better accommodations for the education department of the state at Albany has been felt. Particularly has this been so since the unification of the University of the State of New York and the department of Public Instruction under the law of five years ago. The officers and employees, about three hundred in all, are widely scattered throughout several floors of the capitol building, besides using other buildings in remote sections of the city. This is inconvenient, delays the transaction of business, and increases the expense of administration.

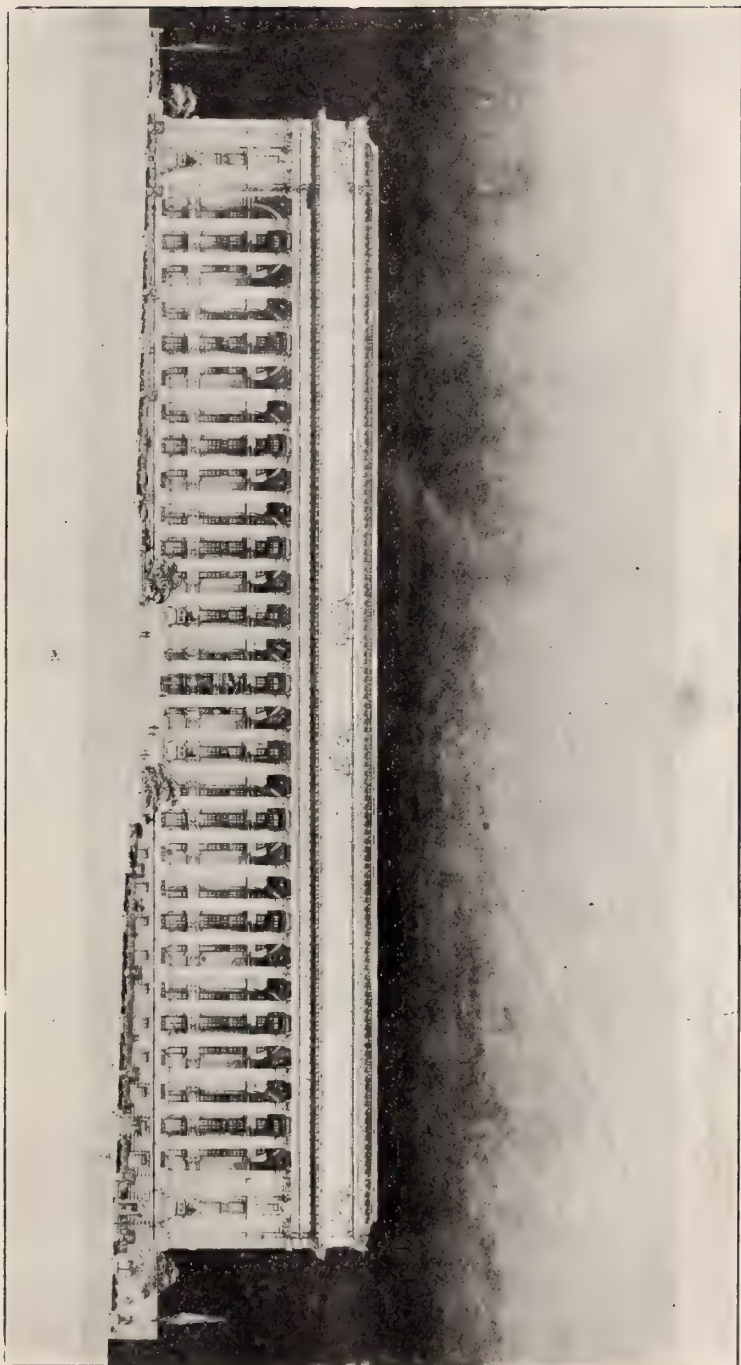
But more than this, the danger from fire is considerable, in which case the probable loss of life must be reckoned upon, which would be without excuse should it occur. The state library needs more room and better light besides greater convenience.

For these and other reasons not necessary to mention at this time, the commissioner of education, Dr. Andrew S. Draper, took the matter up with the regents, who voted to ask the legislature for authority to construct a separate building, to house and properly accommodate all the interests in charge of the education department. Soon thereafter in conference with prominent members of the legislature a bill was prepared by the Commissioner of Education and introduced in the Senate by Hon. John Raines, providing for the acquisition of a site and the erection of a State Education Building. This bill passed the Legislature with but three opposing votes in both houses and became a law on May 31, 1906, through the approval of Governor Frank W. Higgins.

The Commissioner of Education in his fourth annual report went into the matter in great detail, giving a complete history of building. We extract liberally from the report:

Acting under the authority and direction of this act the Trustees of Public Buildings determined upon the two blocks in the city of Albany bounded by Washington Avenue, Hawk, Elk and Swan Streets with the exception of so much of the more

STATE EDUCATION BUILDING—WASHINGTON AVENUE ELEVATION.



northern block as is occupied by the State heating station and the Cathedral of All Saints. Title was secured to the property in some cases by private purchase and in others by condemnation proceedings.

On August 30, 1906, the Trustees of Public Buildings announced the terms of the first architectural competition for the plans of the State Education Building. This program of competition set forth in detail the size and relation of rooms desired in the building; the plans and elevations to be submitted in the contest, and announced that the Board of Award, consisting of the Governor, the Lieutenant Governor, the Speaker of the Assembly, the Commissioner of Education, the State Architect and one member of the Board of Regents, would select the ten most meritorious designs from the sets submitted, pay to the authors of these designs \$500 each and invite them to engage in a second competition. The announcement was further made that the sum of \$1,000 would be paid to each architect participating in the second competition and that the Board of Award would designate the first, second and third most meritorious designs and pay the authors of the second and third designs the additional sums of \$2,000 and \$1,000 respectively, and award the architects' commission for the Education Building to the author of assured responsibility presenting the most meritorious final design at the rate of compensation sustained by the American Institute of Architects after deducting the amounts previously paid him, and after charging him with any proper expense necessary for the services of architectural engineers.

Under the terms of the first architectural competition sixty-three sets of designs were submitted on November 1, 1906. The Board of Award selected the following ten authors as having presented the most meritorious designs:

Allen & Collens, 6 Beacon St., Boston, Mass.

Martin C. Miller & Walter P. R. Pember, Mutual Life Bldg., Buffalo, N. Y.

Pell & Corbett, 31 Union Square, New York City.

George Cary, 184 Delaware Avenue, Buffalo, N. Y.

Palmer & Hornbostel, 63 William Street, New York City.

Wells & Hathaway, 1118 Tremont Bldg., Boston, Mass.

Hedman & Schoen and Goodwin & Jacoby, 302 Broadway, New York City.

J. H. Freedlander, 244 Fifth Avenue, New York City.

Howells & Stokes, 100 William Street, New York City.

P. Thornton Marye and Frederic W. Brown & A. Ten Eyck Brown, Equitable Bldg., Atlanta, Ga.

In a prospectus issued January 10, 1907, these architects were invited to participate in a second competition. This second competition closed on April 1, 1907. After deliberation the Board of Award announced on May 16, 1907, that the design determined to have the highest merit was submitted by Messrs. Palmer and Hornbostel, 63 William Street, New York City, that the second

preference was given to the design submitted by Messrs. Howells and Stokes, 100 William Street, New York City and that the third preference was given to the design submitted by Messrs. Miller and Pember, Mutual Life Building, Buffalo. The architects, Messrs. Palmer and Hornbosted, at once began work upon the plans of the building. The preliminary sketches of the plans, elevations and sections were approved by the Board of Award on August 20, 1907. These plans were further revised and approved by the Board of Award on November 27, 1907. The completed working drawings together with the specifications were approved by the Board of Award on February 10, 1908. It is expected that the Trustees of Public Buildings will advertise for bids for the construction of the building by March 15, 1908.

The Board of Award consisted in the first instance of the late Hon. Frank W. Higgins, Governor, and Hon. M. Linn Bruce, Lieutenant Governor, who served until the completion of their terms of office; Hon. James W. Wadsworth, Jr., Speaker of the Assembly; Dr. Andrew S. Draper, Commissioner of Education; the late Hon. George L. Heins, State Architect, who served until his death on September 25, 1907; and Dr. Albert Vander Veer, Regent, who was designated by the Board of Regents in accordance with the statute. Hon. Charles E. Hughes, Governor, and Hon. Lewis S. Chanler, Lieutenant Governor, have served since taking office on January 1, 1907. Hon. Franklin B. Ware, State Architect, has served since his appointment on October 15, 1907. The Speaker of the Assembly, the Commissioner of Education, and Regent Vander Veer have served continuously.

Chapter 578, laws of 1907, the annual supply bill, provides for the construction of the building as follows:

For beginning the construction of the new State Education Building pursuant to chapter 678, laws of 1906, one million five hundred thousand dollars, (\$1,500,000), payable on the certificate of the Governor, of which one hundred thousand dollars (\$100,000) shall be available immediately, four hundred thousand dollars (\$400,000) on October 1, 1907, and the remainder on March 1, 1908, and from which may also be paid any deficiency in the appropriation made by said chapter for acquiring the site for the building and the expenses incidental thereto. The Trustees of Public Buildings are hereby authorized to enter into contract for the erection and completion of said building, upon terms believed by said trustees to be most advantageous to the State at a total cost of not more than three million five hundred thousand dollars (\$3,500,000) for the building exclusive of the site therefor.

The foundation of the building has been laid and the superstructure is under way. When completed the cost, including grounds, will be about \$4,500,000 and without doubt the result will be the finest building in the world devoted purely to education purposes. We print a picture elsewhere in this issue, showing the front elevation of the structure on Washington Avenue.

The Commissioner of Education, Dr. Draper is entitled to great credit for working out this difficult problem to a successful conclusion. His well known executive powers were put to a severe test, but they were not found wanting.

DR. JACOB GOULD SCHURMAN, president of Cornell University, recently spoke before the Assembly Judiciary Committee in opposition to the antivivisection bills that had been introduced into the legislature. Happily these bills died before the legislature adjourned, but we reproduce the eloquent words of the distinguished educator and commend them to those who agitate the measure annually with such mistaken zeal. Dr. Schurman said in part:

"Who is the genuine humanitarian? Is it the man who wants for himself every variety of animal food, but is so indifferent to the sufferings of his fellow men that he will not allow scientists to conduct their experiments on animals for the relief of those sufferings? The question answers itself. The real humanitarian is the earnest, patient and humane investigator who, with the minimum of pain to animals compatible with his high endeavor to relieve the sufferings of mankind, devotes himself to enlarging our knowledge of the nature and causes of human diseases and discovering the means of their prevention and cure. The man who opposes this beneficent work is either a misguided sentimentalist or an unthinking enemy of his own species.

WHY is a doctor who wishes to live on Sheridan Road on the same plane with a dog? Because he cannot gain entrance to some of the most "exclusive" of the apartments that line that thoroughfare. This is the condition of affairs, according to the *Chicago Record-Herald*, that has been revealed by the approach of the annual Chicago moving day, May 1.

William M. Webster, who owns the Charlafonte apartments, No. 1545 Sheridan Road, is the pioneer of the movement to exclude physicians and surgeons, and owners and agents of many of the other buildings think so well of his idea that they have agreed not to renew any physicians' leases unless the physicians agree not to receive patients in their homes.

Consequently, it is expected that other quarters will be sought by more than a score of doctors who now live in flats that are satisfactory in every particular.

"Doctors' signs mar the esthetic appearance of a first class apartment building," said Mr. Webster's daughter, explaining for her father why doctors had been barred from their building. "We don't allow dogs or cats or children of a tender age in these

apartments and it occurred to father that to make them first class in every respect he might as well place an embargo on physicians while he was at it."

DR. MOSES CLEGG, bacteriologist of the Bureau of Science at Manila, according to despatches of recent date, has succeeded in cultivating the leprosy bacillus. He has made five separate cultures of the bacillus and carried all of them through five successive generations. Dr. Clegg used the organisms from both living lepers and the bodies of victims of leprosy. He has been equally successful in his cultures with the germs of amebic dysentery, establishing a symbolic relationship between the germs of the two diseases.

The Bureau of Science has prepared a leprosy vaccine, and expects to carry forward a series of experiments for the purpose of establishing a specific treatment for leprosy. Dr. Clegg is the son of a prominent Arkansas physician.

AMONG the paintings at the annual exhibition in the Künstlerhaus at Vienna, one by Adams, showing professor Wertheim and his assistants performing an operation in abdominal surgery, has caused so much comment that Professor Wertheim has written an article on the subject for the *Wiener Medizinische Wochenschrift*, in which he says that "no concessions were made for the painter at the expense of the patient." He confesses that neither gloves nor caps were worn by him or his assistants, "but the omission was not in deference to the wishes of Adams, but because gloves are employed only when the operator fears that he may become infected. And as for the cap, my head is so beautifully bald that I need have no fear that a hair or a speck from it may fall upon the operating field. At operations of this kind my assistants usually wear caps, but in this instance they removed them, and that was the only concession made to the artist." As to masks, the writer says he never uses them. In answer to the criticism that the picture showed a scene which it was needless to exhibit to the public, he writes: "Why so? The paintings of Vereschagin show more horrible situations, but no one objects to them, and while they deal with massacre and torture this picture shows an occurrence which has the well-being of a human sufferer in view. It is well that the public should see us at work; nothing should be secret in the practice of medicine." It were well if other prominent operators would take a similar view.

THE individual paper drinking cup which Dr. Thomas Darlington, Commissioner of Health, of New York, has been testing this

winter has been adopted by the Lackawanna Railroad. Passengers on the Lackawanna Limited have commented on a small nickel-plated device adjacent to the water cooler. Closely nested within a tube are a hundred or more dainty white drinking cups, which, once drawn forth and used, cannot be replaced, but must be discarded or carried away.

These cups, which are in the exact form of a drinking glass, are stiffened by a coating of paraffin, and being manufactured automatically, are untouched by hands until they reach those of the drinker.

Last week a call was issued to fifteen State boards of health to join in a movement to abolish the public train cup. Authorities say that there are few dangers within the reach of the traveling public today so grave from a health point of view as the public drinking cup.

JOHN B. KISSINGER, of South Bend, Ind., who submitted to the bite of a yellow fever mosquito in the interest of science while in the army in Cuba and for whose relief a bill has been introduced in Congress is now and has been for years almost helpless.

Kissinger was bitten by mosquitoes carrying yellow fever germs and was then treated by the best medical experts in the army. It was supposed he had recovered his health and that as a result of the experiment yellow fever could be guarded against but he later suffered a breakdown, and he is now a physical wreck, unable to use his feet and legs.

Two others died from inoculation, and in each case the Government has given the widow a pension of \$100 a month. Kissinger's friends say he is entitled to the same amount.

A BANQUET given at Philadelphia some time ago in honor of Dr. John B. Deaver, the well known surgeon, was unique enough to satisfy the most exacting lover of novelty. All the 113 guests were physicians, each of whom had been operated on by Dr. Deaver either for appendicitis or some other serious disease. The fifteen waiters were laymen who had also been patients of Dr. Deaver.

The waiters were dressed as Red Cross orderlies, and the punch was served in mannikins, each of which had a miniature knife stuck in it at the spot where the incision for an operation had been made. The banquet hall was beautifully decorated with flowers and plants. Many of the guests came from a long distance to pay their respects to the great surgeon, eleven states being represented. The occasion was a delightful one and not one of those present regretted the experience that had qualified him for attendance.

NEW ENGLAND has never had a world's fair hence it files a claim through the *Boston Herald*, to the year 1920, in which to celebrate the three hundredth anniversary of the landing of the Pilgrims and the founding of New England. It is proposed to hold a tercentennial exposition in Boston that year, and this early announcement of the fact is made that the whole world may know of the intentions of Boston and New England in the premises. The year 1920 is reserved for the purpose named and, according to the *Herald*, the people of New England will devote the intervening years, in large part, to preparations for an exposition on a scale commensurate with the importance of the event that signaled the birth of the American nation.

THE fight against tuberculosis is being taken up by fraternal societies in various localities. One of the first to enter the field is the "Modern Woodmen of America." This society several months since, acquired 1,380 acres of land within seven miles of Colorado Springs, and has established thereon a sanatorium, the tent colony plan being employed. The first colony plan was ready for the reception of patients on January 1, 1909, and is equipped to care for 60 patients, to which number admissions must be limited for the present.

The action of this society is commendable and should stimulate similar methods by other organisations of like character.

GOVERNOR HUGHES has signed Senator Davis's bill increasing the term of the medical examiner of Erie County to five years and giving the medical examiner the appointment of his deputy. These changes become effective January 1, 1912, when the terms of the incumbents expire. The present medical examiner, Dr. Danser, and his deputy, Dr. Howland, have performed faithful service during their incumbency, and deserve reappointment when the time shall come for that action.

THERE is a more stringent ordinance now against spitting in public places, says the *Buffalo Express*, April 19. The authorities will make an effort to enforce it. Such an ordinance cannot be enforced without the sympathy and co-operation of citizens generally.

Even in the Board of Aldermen the opinion has been expressed that an anti-spitting ordinance is a mere fad as well as an outrage on the liberties of Plain People. The people must be very plain who do not know that consumption and kindred diseases are spread by spittle. They must be very dense who do not realise that the habit of spitting in public is disgusting to many of their fellow beings.

Perhaps a campaign of education is needed, but in the meantime the authorities should do everything possible to enforce the ordinance. A few examples might make a lasting impression.

WITH the going into effect of the new ordinance against spitting in public places, the health department is prepared for a vigorous campaign. The penalty for convictions under this ordinance is arrest and a fine of \$2 to \$100.

The acting health commissioner, Dr. Fronczak, sent a letter to Superintendent Regan recently notifying him of the provisions of the ordinance and requesting him to see that it is enforced. Circulars are being scattered about the city giving notice of the new rules.

A number of other health provisions went into effect recently. One provides that the Overseer of the Poor may furnish ice to poor families during the hot weather.

PERSONAL.

DR. LEWIS S. MCMURTRY, of Louisville, by invitation, delivered an address before the American Gynecological Society at its recent annual meeting at New York, commemorative of the work of Ephraim McDowell, and especially of his first ovariectomy,—the first in the world,—performed at Danville, Ky., December, 1809. Dr. McMurtry lived many years at Danville, was chairman of the McDowell Monument Committee, and is better prepared than any other man living to perform the function imposed upon him.

Commenting upon the event, the New York Medical Journal in its issue of May 1, 1909, said:

The special event in the commemoration last week was the banquet, held on Thursday evening, and it was a happy thought to arrange that Dr. McMurtry's address should be given after the dinner, at a time when it naturally led to sympathetic remarks by other distinguished men. The choice of Dr. Lewis S. McMurtry, the eminent Louisville gynecologist, to speak in commemoration of the pioneer ovariectomist, also a Kentuckian, was peculiarly appropriate. Nobody could utter more telling or more graceful sentences concerning McDowell than those that came from Dr. McMurtry.

DR. VERTNER KENERSON, who has been absent from professional work since April, 1908, resumed his practice at No. 181 Allen

Street, Buffalo, May 1, 1909. His office hours hereafter will be from 1 to 4 P. M.; no morning or evening hours, except by appointment. Doctor Kenerson's private cottage hospital, open to the profession, for selected cases, is at No. 115 Park Street, Buffalo. Telephones at No. 181 Allen St., are Bell, Tupper 70, Frontier 70. At the Cottage, Frontier 13083.

DR. P. W. VAN PEYMA, of Buffalo, has removed from 445 William Street to 242 Norwood Avenue. Telephones: Bell, Bryant 101; Frontier, 12492.

DR. JAMES STODDART, of Buffalo, has removed his office from Ellicott Square to his residence, 470 Franklin Street.

DR. AND MRS. EDWARD T. SMITH, formerly of Fourteenth Street, Buffalo, have moved to their new home, No. 503 Porter Avenue.

DRS. PARK AND MCGUIRE, whose offices are removed to 430 Delaware Avenue, as announced in the JOURNAL for May, have installed a complete clinical laboratory, which is under the direction of Dr. B. T. Simpson. Adequate apparatus is also at hand for x-ray, finsen, radium, and fulguration therapy in suitable cases. Hours: 2 to 4 P. M. Sunday by appointment only.

Telephones: Bell, Tupper 4; Frontier (Federal), 637.

Dr. Park's residence, 510 Delaware Avenue. Telephones: Bell, Tupper 208; Frontier 3599.

SOCIETY MEETINGS.

THE Buffalo Academy of Medicine held meetings during the months of April and May, 1909, as follows:

Section on Surgery.—Tuesday evening, April 6, 1909 at 8.30 P. M. Program. Symposium on diseases of the gall-bladder. (1) Gastric symptoms and complications of disease of the gall-bladder, Allen A. Jones; (2) Diagnosis and surgical treatment of diseases of the gall-bladder, Martin B. Tinker, Lecturer in Surgery at Cornell University Medical College, Ithaca; (3) complications arising in the surgical treatment of diseases of the gall-bladder, Roswell Park.

Section on Medicine.—The regular meeting of this section was held at the Academy Rooms, Public Library Building on Tuesday evening, April 13, 1909, at 8.30 P. M. Pro-

gram: (1) Report of two cases of brain tumor, with exhibition of specimens, Henry P. Frost, Assistant Superintendent Buffalo State Hospital; (2) Report of three cases of pyloric stenosis in infants, Irving M. Snow; (3) Pneumopericardium, with report of a case, Joseph Burke; (4) Medical work in Paris hospitals, A. L. Benedict.

Section on Pathology.—Tuesday evening, April 20, 1909, at 8.30 P. M. Program: The essayist for the evening was Harlow Brooks, of New York city, Assistant Professor of Pathologic Anatomy, University and Bellevue Hospital Medical School. Subject, An anatomical study of pericarditis with its clinical deductions. The discussion was opened by Dr. Charles G. Stockton.

Section on Obstetrics and Gynecology.—Tuesday evening, April 27, 1909, at 8.30 P. M. Program: The relative value of accouchement force in general practice with special reference to vaginal cesarean section, Reuben Peterson, Professor of Obstetrics and Gynecology University of Michigan, Gynecologist and Obstetrician to the University Hospital; Fellow American Gynecological Association; Fellow American Academy of Medicine; Member of Chicago Gynecological Society. The paper was illustrated by magic lantern slides. Discussion by Drs. Mann, Frederick, Schroeter, Van Peyma, Hayd, King and others.

Section on Surgery.—Tuesday evening, May 4, 1909, at 8.30 P. M. Program: Doctors' mistakes, Geo. W. Gay, Boston, Mass., Senior Attending Surgeon of Boston city Hospital, Ex-President, Massachusetts State Society, Lecturer in Surgery at the Harvard Medical School.

Section on Medicine.—Tuesday evening, May 11, 1909, at 8.30 P. M. Program: (1) Report of three cases of pyloric stenosis in infants, Irving M. Snow; (2) Pyelitis, A. E. Woehnert; (3) Splanchnoptosis, A. T. Lytle.

Section on Pathology.—Tuesday evening, May 18, 1909, at 8.30 P. M. Program: Studies in experimental nephritis and their bearing on renal changes in man, John J. MacKenzie, Professor of Pathology and Bacteriology University of Toronto.

The annual election of officers for this section for the ensuing year was held at this meeting.

THE Rochester Academy of Medicine held meetings during the months of April and May, 1909, at the Hotel Seneca, as follows:

General Medicine.—Wednesday, April 7, 1909, at 8.15 P. M. Program: The psychic mechanism of hysterical phenomena as determined by Breuer and Freud, Haydon Rochester; Some remarks on anemia, C. O. Boswell.

Wednesday, May 5. Program: The nervous woman, E. B. Angell; Some remarks on anemia, Charles O. Boswell.

Surgery.—Friday, April 16, 1909, at 8.15 P. M. Program: Four kinds of appendicitis, Robert T. Morris, New York.

Wednesday, May 12. Program: Movable kidney as a pathological factor—two unusual cases, Charles R. Barber.

Candidates for resident and non-resident fellowship were elected at this meeting.

Obstetrics, Gynecology, and Pediatrics.—Wednesday, April 21, 1909, at 8.15 P. M. Program: Suppurative peritonitis, H. L. St. John (by invitation); An unusual case of vicarious menstruation, L. W. Howk.

Public Health.—Wednesday, April 28, 1909, at 8.15 P. M. Program: Present status of vaccine therapy, George W. Ross, University of Toronto.

Obstetrics, Gynecology, and Pediatrics.—Wednesday, May 19, at 8.15 P. M. Program: Antelexion of the uterus, Marion Craig Potter. Discussion opened by F. W. Zimmer.

THE Medical Society of the County of Niagara, at its annual meeting held at the Imperial Hotel, May 10, 1909, elected the following named officers: president, E. B. Horton; vice-president, L. H. Teeter; secretary-treasurer, J. H. Miller; censors and trustees, A. J. Lawler, one year; W. A. Scott, two years; C. G. Leo-Wolf, three years.

THE American Medical Association will hold its sixtieth annual meeting at Atlantic City, June 8-11, 1909, under the presidency of Col. William C. Gorgas, M.D., U. S. Army. Railway rates have been established at a fare and a half under the usual conditions.

THE American Protologic Society will hold its eleventh annual meeting at Atlantic City, N. J., June 7 and 8, 1909. The headquarters and place of meeting are at Haddon Hall. The profession is cordially invited to attend all meetings. Dr. Lewis H. Adler, Jr., of Philadelphia, is the secretary.

THE American Medical Editors Association will hold its fortieth annual meeting at Atlantic City, N. J., June, 1909. The officers are: President, T. D. Crothers, editor, *Quarterly Journal of Inebriety*, Hartford, Conn.; first vice-president, W. A. Young, managing editor, *Canadian Journal of Medicine and Surgery*, Toronto, Ont., Can.; second vice-president, E. W. Taylor, editor, *Boston Medical and Surgical Journal*, Boston, Mass.; secretary-treasurer, Joseph MacDonald, Jr., managing editor of the *American Journal of Surgery*, New York, N. Y. Office of the secretary and treasurer, 92 William St., New York City.

THE National Confederation of State Medical Examining and Licensing Boards will hold its nineteenth annual meeting at Atlantic City, Monday, June 7, 1909, in the Park Avenue Hall of the Hotel Marlborough-Blenheim. The president, Dr. T. J. Happel, being ill, the first vice-president, Dr. A. Ravogli, Cincinnati, assumes the duties of the chair. Three sessions will be held, one at 10 o'clock in the morning, one at 2 o'clock in the afternoon, and a final one at 8 o'clock in the evening. The program is:

I. Annual Address, by the Vice-President, A. Ravogli, Cincinnati, Ohio. The Necessity of a Practical Test for Candidates in the State Examinations.

II. Report of the Committee on Standing of Medical Colleges, James A. Duncan, Vice-Chairman, Toledo, Ohio.

III. Symposium on Medical Colleges and Their Equipment. (1) The Need, Methods and Value of Medical College Inspection, N. P. Colwell, Chicago, Ill.; (2) The Standing of Medical Colleges in the Light of State Board Examinations, Geo. H. Simmons, Chicago, Ill.

Discussion opened by Arthur Dean Bevan, Chicago, Ill.; James A. Duncan, Toledo, O.; W. J. Means, Ohio University, Columbus, O.; F. Forchheimer, University, Cincinnati, O.; and Geo. H. Quay, Homeopathic Medical College; R. A. Baker, College Physician and Surgeon; F. C. Wait, Western Reserve University, Cleveland, O.

IV. Report of the Legislative Committee, Edwin B. Harvey, Chairman, Boston, Mass.

V. Report of the Examinations Committee, J. C. Guernsey, Vice-Chairman, Philadelphia, Pa.

VI. Symposium on Examinations: (1) Practical *versus* Theoretical Examinations, W. T. Councilman, Boston, Mass.; (2) How Can Practical Examinations be Conducted and What

Should They Include? Charles A. L. Reed, Cincinnati, Ohio; (3) The Inadequacy of the Written Examination, Edwin B. Harvey, Boston, Mass.; (4) What Branches or Portions of Branches Should be Included in the Written, and What in the Oral Examinations? J. C. Guernsey, Philadelphia Pa.; (5) Is it to the Best Interests of Students and Medical Examining Boards to have Divided Examinations? William Warren Potter, Buffalo, N. Y.; (6) The Feasibility of Practical Examinations, Augustus Korndoerfer, Philadelphia, Pa.; (7) How Can Practical Examinations be Graded and Recorded? L. F. Bennett, Beloit, Wis.

Discussion, opened by V. C. Vaughan, Ann Arbor, Mich., Herbert L. Northrop and Henry Beates, Philadelphia, Pa.

VII. Report of the Secretary-Treasurer, Murray Galt Motter, Washington, D. C.

VIII. Miscellaneous Business.

IX. Report of the Executive Council, N. R. Coleman, Chairman, Columbus, Ohio.

X. Election of Officers.

XI. Adjournment.

COLLEGE AND HOSPITAL NOTES.

CAROLINE REST, a sanatorium for convalescing mothers who are poor, was formerly opened at Hartsdale, Westchester County. May 5, 1909. Four hundred invited guests, of whom most were women, attended the exercises. Talk on the train had been light and free, but there was something solemn about the dedication of Caroline Rest, established to meet a pathetic need, as a memorial to Caroline Schrader.

R. Fulton Cutting, president of the board of managers, presided. He told how George H. F. Schrader, son of Caroline Schrader, was touched by the fact that many poor mothers were compelled to return to the factory or to the care of the household within a week after childbirth. He therefore caused to be erected the building, beautiful in appointments and location, that was opened recently. It was deeded by Mr. Schrader to the New York Association for Improving the Condition of the Poor.

Robert W. Hebbard, Commissioner of Public Charities of New York, said the building was ideal for the purposes it was designed to meet, and that it was superior in detail to any building erected by the city for charitable purposes. Other speakers

were Dr. John Winters Brannan, president of Bellevue and Allied Hospitals, and the Rev. Dr. Dennis J. McMahon.

The building can accommodate ninety persons, who, it is intended, shall be divided into three equal classes—mothers, children under eight years old and babies. The house, two and a half acres of ground and the endowment fund represent, it is said, a gift of \$500,000 by Mr. Schrader, who, by the way, was too modest to be present. An officer of the association said Mr. Schrader had hurriedly departed for Europe to escape hearing his praises spoken.

Dr. McMahon said: "Caroline Rest is not only a sanatorium for mothers with infants, but a school where, under the most favorable conditions, mothers of the poor will receive instruction in the duties of motherhood, in personal hygiene, the care of their children and the right conduct of their homes."

The work at Hartsdale will be supplemented in this city by the Caroline Rest nurses, who, it is said, will visit mothers before and after confinement, and through instruction and special care promote their health and that of their children.

Members of the board of managers are Robert Shaw Minturn, Frederick Trevor Hill, John G. Agar, the Rev. Dr. John B. Devins, Leonard P. Opdycke, Percy R. Pyne, De Witt J. Seligman, R. Bayard Cutting and Isaac Townsend.

A NEUROLOGICAL institute for the treatment and study of nervous disorders is to be founded in New York, through the efforts of two local specialists in nervous diseases, and the subscriptions of a number of wealthy men. More than \$100,000 has already been subscribed, and the construction of a building will begin as soon as a suitable site can be procured.

THE big four-story granite and graystone staff house for the internes of the City Hospital, on Blackwell's Island, New York, was formally opened April 15, 1909. The building is known as Janeway Hall, and will be the home of the physicians connected with the City Hospital. It is named in honor of Dr. Edward G. Janeway, who attended the exercises. The new building is 75 by 35 feet in size, and cost \$75,000. It has twenty-six sleeping rooms, one for each doctor; a library, a staff room and a large dining room. Doctors of the city hospital now boast that they have the finest staff house of any hospital in the city.

A CONTAGION pavilion is to be built on the site of the Kimberly Cottage by the trustees of the Buffalo General Hospital. It will be one of the finest buildings of its size and kind in the country.

The trustees of the hospital have decided to bear the expense among themselves. The pavilion will fill a much needed place. It will be used primarily for patients who contract contagious diseases while patients at the General.

The Kimberly Cottage has outgrown its usefulness and will be torn down. Work on the new building will begin soon. The accommodations of the pavilion will be of the best. There are to be eight rooms for patients and others for nurses and attendants. Each will have toilet and showers, and may be arranged en suite.

The building will have four entrances and two exits. The exterior will be of buff brick, like the other buildings. In the basement will be a huge sterilizer.

A COURSE S 43-44, will be given in the Summer School, Columbia University, Department of Chemistry, New York, during the six weeks, July 7 to August 18, 1909. This course can be so modified as to include the study of those important organic substances which are of interest to medical men. The subject will be treated from the organic chemistry side and will include the results of the latest investigations. The following classes of compounds will be considered: sugars and carbohydrates, fats, amino acids and the hydrolysis of proteids, the uric acid group, alkaloids, essential oils, the artificial remedies and the bearing of their chemical constitution on their physiological function, etc. A series of eighteen lectures will accompany the course, if the attendance is sufficient to warrant it.

The following other courses will also be given: S E—Elementary physiological chemistry. S F—Chemistry of nutrition. S 171a—Organic and sanitary analysis. S 37—Elementary physical chemistry.

Further information concerning any of these courses can be obtained from the Summer School Announcement, and by writing to Professor J. Livingston R. Morgan.

BOOKS AND AUTHORS.

A Textbook of Medical Chemistry and Toxicology. By **James W. Holland**, M.D., Professor of Medical Chemistry and Toxicology, Jefferson Medical College, Philadelphia. Second revised edition, octavo of 655 pages, fully illustrated. Philadelphia and London: W. B. Saunders Company, 1908. (Cloth, \$3.00 net.)

Four years ago, when the first edition of Professor Holland's work appeared, we gave favorable comment upon it in these columns, not only as to its material but also as to its arrangement, all being especially adapted to the necessities of the stu-

dent. The section on the urine is the best we have seen both for the student and the practitioner; it is compact, clear, and incisive, telling just enough for both classes of readers. This new edition has been thoroughly revised. We give in the author's own words the more important changes: "While almost every page has been modified for the better, the additions to be especially noted are those relating to the electronic theory; chemical equilibrium; Kjeldahl's method of determining nitrogen; classifications of alkaloids and of proteoins; chemistry of foods and their changes in the body; synthesis of proteoins, and the latest improvements in urinary tests."

Without doubt this book will be recognised as the most practical working textbook for the student and become his companion in the laboratory. Professor Holland is an experienced teacher and a chemist of great knowledge and skill. He has created a book that is entertaining as well as instructive,—an unusual combination in a work on chemistry.

Epoch-Making Contributions to Medicine, Surgery, and the Allied Sciences; being reprints of those communications which first conveyed Epoch-Making observations to the scientific world, together with biographical sketches of the observers. Collected by **C. M. B. Camac**, M.D., of New York City. Octavo of 435 pages, with portraits. Philadelphia, London. W. B. Saunders Company, 1909. \$4.00 net.

A collection of scientific masterpieces like this that have been buried in a mass of literature, therefore inaccessible, is invaluable for reference both to the senior and junior members of the medical profession. The first section deals with antiseptics and contains Lord Lister's famous article on the antiseptic principle of the practice of surgery. The circulation of the blood next appears, and William Harvey's disquisition on the subject is published. Auenbrugger's original treatise on percussion of the chest is next to follow, and then comes auscultation and the stethoscope with Laënnec's writings. Vaccination against small-pox with writings from the immortal Jenner are next given place, then anaesthesia, with writings of Morton, Wells, Warren, and Simpson, is set forth; finally, puerperal fever and Oliver Wendell Holmes's essay, brings the volume to a close. Each section, in addition to the writings referred to, contains a portrait of the author, together with a biographical sketch, and a list of his writings.

It must be remembered that the teachings of original observers are of great value even at the present day, that ignorance of these teachings may lead to grave errors; hence the importance of this work in placing in the hands of the profession these classics of medical literature in such available form. The book constitutes an ornamental, as well as useful volume for the table or shelf.

Practical Dietetics with reference to Diet in Disease, by **Alida Frances Pattee**, graduate, Boston Normal School of Household Arts. Late Instructor in Dietetics, Bellevue Training School for Nurses, Bellevue Hospital, New York City. Fifth edition. 12mo, cloth. 300 pages. A. F. Pattee, Publisher, Mt. Vernon, N. Y. New York Office, 52 West 39th St., N. Y. (Price, \$1.00 net. By mail, \$1.10. C. O. D. \$1.25.)

One of the remarkable features of Miss Pattee's book is that she is both author and publisher. It has been an unusually successful book, too, being now in its fifth edition. It is in use in the army hospitals, and is adopted as a textbook by the state boards of examiners for nurses in many states. We have regarded it from the first as one of the best authorities on dietetics extant. It contains the diet lists for various diseases and tells what foods to avoid in each. It also instructs as to the proper food for infants, based on the recommendations of experienced physicians. It is a reference book on diet for the physician and teaches the student what cannot be learned in the classroom. In short, it is a book for physicians, student, nurse, hospital and home.

Bacterial Food Poisoning. A Concise Exposition of the Etiology, Bacteriology, Pathology, Symptomatology, Prophylaxis, and Treatment of So-Called Ptomaine Poisoning. By **Professor Dr. A. Dieudonné**, Munich. Authorized translation, edited, with additions, by **Dr. Charles Frederick Bolduan**, Bacteriologist, Research Laboratory, Department of Health, City of New York. 8vo, 125 pages. New York: E. B. Treat & Co., Medical Publishers, 241-243 West 23d Street. (Cloth, prepaid, \$1.00 net.)

It is well to have food poisons pointed out to the profession in such an accessible form as this book presents. This monograph deserves the careful study of physicians, and it contains much that would prove interesting and instructive to the laity. Poisoning due to eating the meat of diseased animals is often so subtle as to escape observation as to cause until sickness therefrom is well under way. Bacteriology here often points out the way when otherwise the attendant would wade in doubt, possibly until too late to effect cure. When meat is eaten that has undergone putrefactive changes, the poison is more active—ptomaines—and the case may prove fatal in a few hours. Next to meat in importance comes fish and molluscs, and then canned foods play an important part in causing poisoning. The monograph should have a wide circulation as it deals scientifically with questions of great importance.

Blood Examination in Surgical Diagnosis. A Practical Study of Its Scope and Technic. By **Ira S. Wile**, M.D., New York. Duodecimo; 161 pages; 35 illustrations and 1 double-page colored plate. New York: Surgery Publishing Company, 1908. Cloth, price \$2.00; oil cloth for laboratory use, \$2.50; de luxe ooze leather, price \$3.00.

The special object of this book, as its title indicates, is to point out the value of blood examination as an aid to surgical

diagnosis. Literature has been examined with reference to its surgical value in a hematological sense, facts have been grouped as far as they apply and the result is this work, which might properly bear the name of surgical hematology. But this is not all: the author has done some original work that is herein incorporated. The surgical interpretation of the total leukocyte count is new, and so is the differential count. The publisher sends out a "review" from which we extract the following description, stripped of its somewhat fulsome praise.

Lacking in hematological dogmatism it abounds in a surgical conservatism that makes it a safe authority to follow. The consideration of anti-operative, operative and post-operative conditions affecting the blood is logical and well arranged. The book is an example of the printer's art and the bookbinder's ability. The topography is clear and attractive, and the marginal notes in red are useful. The double-page colored plate shows six blood pictures and in addition twenty-nine illustrations of the various types of cells as they appear with the Jenner stain. While these will serve to interpret, the numerous other blood pictures printed only in black, have added to the value of the book.

Primary Studies for Nurses: A Textbook for First Year Pupil Nurses. By **Charlotte A. Aikens**, formerly Superintendent of Columbia Hospital, Pittsburg, and of the Iowa Methodist Hospital, Des Moines. 12 mo. of 435 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1909. Cloth, \$1.75 net.

This book is intended especially for first-year pupil nurses, yet is appropriate for even more advanced students. It contains just enough on the topics of anatomy and physiology to be suggestive of those subjects for more advanced grades. The definitions are simple that they may come within the comprehension of the novice. Hygiene is the subject of the second section, general hygiene being presented first, then personal hygiene. The third section deals with bacteriology, the fourth with therapeutics and materia medica, the fifth with dietetics, the sixth with invalid cookery, while the seventh section presents questions for self-examination and review. Thus it will be observed that primary topics are handled for the benefits of beginners. Miss Aikens is a master of her subject and her book is the best of its class.

A Textbook of Materia Medica, Pharmacology and Therapeutics. By **George F. Butler**, M.D., Professor and Head of the Department of Therapeutics and Professor of Preventive and Clinical Medicine, Chicago College of Medicine and Surgery, Medical Department Valpariso University. Sixth edition, revised and enlarged. Octavo of 708 pages. Philadelphia and London: W. B. Saunders Company, 1908. (Cloth, \$4.00 net, half-morocco, \$5.50 net.)

That this textbook enjoys a full measure of popularity is attested by the fact that six editions have been put forth since

1896. It is a book for both physician and student, its arrangement being such as to suit both classes of readers or searchers. All the official and some of the unofficial remedies are mentioned. This edition follows the same lines as those that have preceded it. The book is free from useless verbiage, or obsolete material, practical rather than theoretical, and is well to the fore in all that relates to materia medica, pharmacology, and therapeutics. Butler is of the opinion that the present tendency toward agnosticism in therapeutics and to nostrum prescribing are due to the neglect of therapeutics in the medical schools—a condition from which he seeks to reclaim the profession.

- I. **Atlas and Epitome of External Diseases of the Eye.** By Professor Dr. O. Haab, of Zurich. Edited, with additions, by George E. deSchweinitz, M.D., Professor of Ophthalmology, University of Pennsylvania. Third revised edition. With 101 colored lithographic illustrations on 46 plates and 244 pages of text. Philadelphia and London: W. B. Saunders Company, 1909. Cloth, \$3.00 net.
- II. **Atlas and Epitome of Ophthalmoscopy and Ophthalmoscopic Diagnosis.** By Professor Dr. O. Haab, of Zurich. Edited, with additions, by George E. deSchweinitz, M.D., Professor of Ophthalmology, University of Pennsylvania. Second revised edition. With 152 colored lithographic illustrations and 94 pages of text. Philadelphia and London: W. B. Saunders Company, 1909. \$3.00 net.

I. These two volumes, being each the counterpart of the other, may be reviewed together with propriety. The first, on ophthalmoscopy or the use of the ophthalmoscope in diagnosis, is a most valuable exposition of the subject, and should be mastered by every beginner. The text is clear, incisive, and brief, making it easy to acquire the necessary knowledge of the technic of the instrument to examine the eye-ground, in a short time. The colored plates of the atlas are exact portrayals of pathologic conditions, after giving the normal eye-ground, and are 87 in number, giving 152 illustrations. They deserve a word or two of commendation for, although we mentioned their superior quality when noticing the first edition, we desire to emphasise their excellence again. It is doubtful if ever before have such splendid portrayals of the interior structures of the eye been published in book form. The publishers are entitled to great credit for the superb manner in which their work is done.

II. Unlike the previous volume, in this one the illustrations are distributed throughout the text, which enables the reader to examine the disease which he is considering. There are 101 illustrations in this book depicting the most important diseases and injuries of the eye. It is remarkable how well the artist has pictured these affections, the approach to perfection, indeed, being very close; to examine these reproductions in connection with the text is the next thing to seeing the patients themselves

in the clinic. Every one interested in ophthalmology, be he student or practitioner, will be sure to appreciate the efforts of author, artist, and publishers to bring out this work on such a high plane of perfection. In the first American edition of these books was given notice in detail, hence further remarks at this time would seem inappropriate if not unnecessary.

Anatomie Und Mechanismus Der Skoliose. By Dr. Carl Nicoladoni, Graz. Illustrated. Berlin: Urban & Schwarkenberg.

This monograph consists of sixty pages of text, and an atlas containing thirty-seven plates on which are fifty-four engravings. The illustrations exhibit all phases of the bony conditions pertaining to scoliosis. They are superbly drawn and illumine the text in a satisfactory manner, bringing out the anatomy, of the disease and showing its mechanism. It is desirable that an English translation of the text should be made in order that the monograph may become available to all interested in the disease who may not read German.

Transactions of the Sixth Annual Conference of State and Territorial Health Officers with the United States Public Health and Marine Hospital Service, held at Washington, D. C., April 27, 1908.

This book contains an interesting report of conferences by health officers throughout the country with the surgeon-general of the Public Health and Marine Hospital Service, for the purpose of bringing about concert of action regarding interstate quarantine regulations and other public health measures. It contains a verbatim report of the work of the conference, and should be read by every state and territorial health officer. It also, would be well if local health officers were supplied with copies of the book along our great rivers and other waterways. Too much intelligence can not be gained regarding the spread of contagious diseases.

New and Nonofficial Remedies. Articles which have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association, prior to January, 1909. Chicago: Press of the American Medical Association, 103 Dearborn Avenue. (Paper, 25c; cloth, 50c.)

This small volume contains a description of the medicinal substances that have been approved by the council on pharmacy and chemistry of the American Medical Association. The contents embrace only those remedies examined prior to January 1, 1909. There is no occasion to "review" the book in the ordinary acceptance of the term. The council sends with the work a statement of its purpose from which we extract a few sentences.

This is the first regular edition of the Annual New and Non-official Remedies. Instead of adhering strictly to an alphabetic arrangement a classification has been adopted which permits an easy comparison of remedies of similar origin and properties. Mixtures are to be found in the appendix and a number of non-proprietary preparations have been added which, for various reasons, have not been admitted to the pharmacopeia. The descriptions in the appendix have been made as brief as possible and the articles are classified under the names of the manufacturers.

The descriptions of processes of preparations, chemical and physical, and of the physiologic action contain much information which can not fail to be of immense value both to physicians and to pharmacists. Over 200 different remedies are described, and after mastering the pharmacopeia the practitioner and the student should become thoroughly familiar with this presentation of the newer materia medica.

Refraction and How to Refract, including sections on Optics, Retinoscopy, fitting of Spectacles and Eye Glasses. By **James Thorington**, A.M., M.D., professor of diseases of the eye in the Philadelphia Polyclinic and College for graduates in medicine, etc. Fourth edition. Two hundred and twenty illustrations, thirteen being in colors. Philadelphia: P. Blakiston's Son & Company. 1909. (Price, cloth \$1.50.)

This author is an experienced refractionist, and is an expert with reference to all that pertains to the subject. Four editions in ten years on such a topic speak emphatically as to its value. It is so important that eyes shall be fitted properly when glasses are required, that we need scarcely discuss the matter, particularly as the laity also understands its importance pretty well. The illustrations, many being original, deserve mention as they are very helpful in explaining the text. Thorington has carefully revised the reading matter in this edition, and incorporated an appendix that further develops information relating to refraction. As now constituted, it is doubtful if any work equals it on the subject with which it deals.

Theory and Practice of Infant Feeding with notes on development, by **Henry Dwight Chapin**, A.M., M.D. Professor of Diseases of Children. New York Post-Graduate Medical School and Hospital. Third edition, revised, with illustrations. New York: William Wood & Co. 1909.

Chapin is an experienced, scientific pediatricist, and has an especial gift in the direction of infant feeding. He has created a book that is second to none on this subject. The two editions preceding this were issued before the science and art of infant feeding had reached its present stage. Chapin, himself, states in effect that methods formerly deemed unscientific are now ac-

knowledge to be in accord with natural biological laws; whereas, some methods formerly employed have been proven to be inadequate, if not improper. Hence, in this edition the chapters on practical feeding have been rewritten, while sections on the principles of top milks and the standardisation of gruels have been added. The work now stands at the head of the list on the feeding of infants.

Seven Hundred Surgical Suggestions. Practical Brevities in Surgical Diagnosis and Treatment. By **Walter M. Brickner**, B.S., M.D., Assistant Adjunct Surgeon, Mount Sinai Hospital, New York; Editor-in-Chief, American Journal of Surgery, Eli Moschowitz, A.B., M.D., Assistant Physician, Mount Sinai Hospital Dispensary, New York, and Harold M. Hays, M.A., M.D. Third Series. Duodecimo; 153 pages. New York: Surgery Publishing Co., 92 William Street. Price, semi de luxe, \$1.00; full library de luxe ooze leather, gold edges, \$2.25.

Though this book is small it contains much that is useful. It is of value, in particular, for the junior practitioner and its size is such as to permit it to be carried in the pocket. The topics are classified under marginal headings in red, making any desired subject easy of access. It would be difficult to improve upon the mechanical make-up of the book when its purpose is taken into consideration. If every book, large or small, presented as much material of real value as this one, medical libraries would contain more scientific truth than they do at present.

Clinical Diagnosis and Treatment of Disorders of the Bladder with Technic of Cystoscopy, by **Follen Cabot**, M.D., Professor of Genitourinary Diseases, Post-Graduate Medical School; Attending Genitourinary Surgeon, Post-Graduate and City Hospitals, New York. 8 vo, 225 pages. Forty-one illustrations, 1 colored plate. Prepaid \$2.00. New York: E. B. Treat & Co., Medical Publishers, 241-243 West 23d street, New York.

Here is a small book the object of which is to teach the general practitioner methods of diagnosis and treatment of diseases of the urinary bladder. There is no floundering about in the mazes of high-flown language. It is a simple exposition of the better methods of diagnosis and treatment in conditions which, when they are met with by the general practitioner, are either ignored because of lack of understanding of their importance or entirely overlooked. The cystoscope is given careful consideration and the various instruments and the methods of their manipulation are clearly described.

The chapters on cystoscopic examination might be read to the literary advantage of other writers, for the style is clear, concise and understandable. If the general practitioner reads and takes to heart only those chapters which deal with cystitis and its causes, he will be well repaid for the time expended, for a better, clearer more comprehensive statement of the facts as

bearing on this distressing condition has never been written in any book.

The illustrations deserve a word of praise. They are simply excellent and are neither exaggerated nor overdrawn. The book is small, but it is worth while.

N. W. W.

BOOKS RECEIVED.

The Practical Medicine Series. Ten volumes. Issued under the general editorial charge of Gustavus P. Head, M.D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Vol. I, General Medicine, edited by Frank Billings, M.S., M.D. Head of the Medical Department and Dean of the Faculty of Rush Medical College. Series 1909. Chicago: The Year Book Publishers. (Price, \$1.50; entire series, \$10.00.)

The Practical Medicine Series. Ten volumes. Issued under the general editorial charge of Gustavus P. Head, M.D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Vol. II, General Surgery, edited by John B. Murphy, A.M., M.D., LL.D., Professor of Surgery in the Northwestern University; Attending Surgeon and Chief of Staff, Mercy Hospital. Series 1909. Chicago: The Year Book Publishers. (Price, \$2.00; entire series, \$10.00.)

Writing the Short-Story. By J. Berg Esenwein, A.M., Lit. D. Editor of Lippincott's Monthly Magazine. Author of *How to Attract and Hold an Audience*. Cloth, 12mo, 448 pages. Price. \$1.25. Published by Hinds, Noble & Eldredge, New York.

LITERARY NOTES

THE philosophy of long life is interesting to all who believe in the happiness of health, or who are interested in the Emmanuel Movement, or the theories of Metchnikoff and Fletcher. The "Philosophy of Long Life," published this week by John Lane Company, should be a stimulus to all such. Death and life have been the two subjects which have commanded the attention of mankind more than all else from the building of the pyramids to the present. M. Finot looks at life as a force which permeates all things, inanimate objects as well as animals. His conclusion, therefore, is that life is indestructible, and he gives practical suggestions for the prolongation of our life in this world, and for banishing the helplessness of old age. He believes that he has found "The Cure for Old Age," and teaches calmness in the face of death. The book has run through fourteen editions in France alone, and is being translated into almost every language. It is a philosophy for lovers of life.

THE Modern Medicine Publishing Co., announce for early publication a work on phototherapy entitled *Light Therapeutics*, a

practical manual: physics, physiologic effects, technic, therapeutics, clinical applications, by Dr. J. H. Kellogg, Superintendent of the Battle Creek Sanitarium. Light Therapeutics will contain about 225 pages and 75 illustrations, printed in large clear type, and substantially bound in cloth. Price, probably, \$2.00 net.

Journal of Pharmacology and Experimental Therapeutics is announced. Without rigidly defining the scope of the new journal it may be stated that its pages will be open not only to pharmacologists and workers in experimental therapeutics but also to the representatives of any of the biological or medical sciences who may wish to offer papers that have a close relationship to pharmacological or therapeutical questions.

The Journal will be carried on with the collaboration of the members of the recently organised Society for Pharmacology and Experimental Therapeutics.

In addition, a number of leading men of science in this country and in Europe have promised the new journal their support.

At least six numbers of the Journal will be issued yearly and will constitute a volume of not less than six hundred or more than six hundred and fifty pages.

The price of the Journal will be \$5.00 per volume, sent post-paid to subscribers in all countries. Contributors will receive one hundred copies of their papers free of charge and additional copies will be furnished at cost.

The first number of the Journal will be issued at an early date—about May 1, 1909.

Subscriptions and correspondence concerning business matters should be addressed to THE WILLIAMS & WILKINS PUBLISHING COMPANY, 2427-2429 York Road, Baltimore. Specimen copies of the Journal will be supplied upon application to the publishers.

MISCELLANY.

A BOARD of commissioned medical officers will be convened to meet at the Bureau of Public Health and Marine-Hospital Service, 3 B street SE., Washington, D. C., Monday, June 14, 1909, at 10 o'clock a. m., for the purpose of examining candidates for admission to the grade of assistant surgeon in the Public Health and Marine-Hospital Service.

Candidates must be between 22 and 30 years of age, graduates of a reputable medical college, and must furnish testimonials from responsible persons as to their professional and moral character. For further information, or for invitation to appear before the board of examiners, address "Surgeon-General, Public Health and Marine-Hospital Service, Washington, D. C."

BUFFALO MEDICAL JOURNAL.

VOL. LXIV.

JULY, 1909.

No. 12

ORIGINAL COMMUNICATIONS.

Uro-Genital Tuberculosis¹

With especial consideration of Tuberculosis of the Bladder

By BRANSFORD LEWIS, M. D., St. Louis.

I N acknowledging my deep appreciation of the honor you have conferred in inviting me to be your guest and essayist this evening, I am expressing the thought that is first and foremost in my mind. I have long looked forward to the time when I could have the opportunity of visiting this mother state, of which we hear so much in our part of the country,—and always in words of deep affection,—by your numerous sons who have been lost, strayed or stolen in that direction.

Though never before a visitor in South Carolina, my own Southern blood permitted not the slightest misgiving as to whether I should feel "at home" on arrival here; I only looked forward to the pleasure that I felt was in store for me; of coming face to face with the scenes and birthplace of a large share of American history; of events that thrill the loyal heart of every American citizen. I wanted really to see Fort Moultrie, where Sergeant Jasper replaced the flag, and to become personally acquainted with your metropolis, Charleston, that has occupied the lime light in so many eventful incidents, from cannon balls to earthquakes and, anon, from pills to politics.

But, coming down to the subject that is to engage our attention just now, an easier and clearer conception of uro-genital tuberculosis is obtained, when the general scheme or plan of attack made on these organs by this infection is understood. It is claimed by certain students of this subject that tuberculosis is never primary in the urinary or sexual organs; that, although its first *clinical manifestation* may be focussed here, the development is really secondary to some unrecognised involvement elsewhere,—a latent pulmonary lesion, or even a lymph gland.

1. The address on surgery, delivered before the South Carolina Medical Association, April 21, 1909, at Summerville, S. C.

However this may be, there are certain general plans followed in the development of the infection when it does involve the genitourinary system, that now seem fairly well understood and attested.

Transmitted in any one of five different ways, the tubercle bacilli reach the genitourinary organs (1) through the blood-vessels; (2) through the lymph channels; (3) by means of the physiological secretions, the urine, semen; (4) by continuity of tissue; (5) by contiguity.

Being thus transmitted, it is found that certain organs of the genitourinary system habitually receive the brunt of the attack first, while others invariably stand secondary in this respect. In the vast majority of all cases in which the uro-genital organs are implicated, one or the other kidney is the location of the first attack (never both at the same time); in a very small proportion of such cases one or the other epididymis is the point of initial attack.

From these respective foci extension of the infection spreads in the direction of the physiological secretions (urine and semen); that is, from the kidney downward, along the ureter to the bladder, and from the epididymis upward, along the vas deferens, the seminal vesical ejaculatory duct, prostate to the urethra and vesical neck. Thus the bladder stands in the line of attack from either direction; and therefore stands a most excellent chance of being ultimately concerned in the disease process, no matter from whence it comes.

The determination of these facts (chiefly contributed by Motz and Hallé, *Annales des maladies des organes génito-urinaires*, 1906, XXIV., p. 161) has finally settled the old time discussion on "ascending and descending infection," as to whether the infection ascended from bladder to kidney, or descended from kidney to bladder. In the presence of infection of both kidney and bladder, it is assured that the kidney is the organ primarily involved, and the extension has been to the bladder, either by the ureter or its lymph ducts. If the infection has come up from the genital gland, the bladder stands in the same secondary relationship also.

In other words, *vesical tuberculosis is an affection invariably secondary to tuberculosis of some other uro-genital organ*, and must be so considered in respect of diagnosis, prognosis, therapy and management.

Probably we would have difficulty in getting a patient affected with tuberculosis of the bladder to acknowledge that the bladder was "secondary" in any respect. It is usually the most absorbing and vivid exemplification of misery incarnate that he can imagine.

Location of Early Evidences of Vesical Tuberculosis.—The early expression and location of the disease are much influenced by the mode of production of the infection. If the implantation is an ascending one, from testes and vesicles or prostate, the early manifestations will be on the trigone or the vesical neck; but if the germs have descended from a kidney by way of a ureter, the ureter itself or its immediate neighborhood is the point that first capitulates and becomes reddened, swelled, inflamed and finally ulcerated.

Marital Tuberculosis.—It has been claimed that sexual intercourse presents a mode of direct transference of tubercle bacilli and infection that shows itself with sufficient frequency to be taken into account. I have myself observed instances of this sort, one in particular in which tuberculosis of the bladder occurred in a wife whose husband, a physician, was the subject of advanced general tuberculosis, and the coincidence was very striking, but investigation into the history of the wife showed that her own family history was not above suspicion. This question has been the subject of careful scrutiny and analysis by Mr. E. G. Pope, of the Adirondack Sanitarium, who concludes that there are too many sources of error as yet to fix the responsibility of direct contagion on matrimonial association. He believes, further, that assortive mating (the tendency among subjects of certain diseases to select in marriage those with like marked tendencies as themselves) accounts for two-thirds and infective action for not more than one-third of the whole correlation observed in these cases (quoted in *Journal of American Medical Assn.*, September 5, 1908). If this mode of infection were a frequent factor the woman would be the chief sufferer, from the deposition and retention of tubercle bacilli in the recesses and folds of the vagina, but records indicate that women are affected with vesical tuberculosis about one-third less than men.

Mode of Development.—The stages of development of tuberculous cystitis may be divided as follows (Motz and Hallé):

1. The stage of invasion and formation of tubercles.
2. The stage of inflammation and superficial ulceration.
3. The stage of deeper infiltration.
4. Stage of widespread destruction (Walker).

In the earliest period (invasion) there are white or grey tubercles and injected areas, without the presence, necessarily, of ulceration. Some have sought to call this "tuberculosis of the bladder" as differentiated from tuberculous cystitis, but the differentiation is artificial; they are stages of the same process.

Ulceration shows itself after the apex of the tubercle becomes necrotic and breaks down. These independent ulcers

tend to coalesce and make the larger ulcers that are typical of the process.

Such ulcers are sharp-edged, sometimes slightly undermined, with their surface irregular and uneven, and liable to be covered with greyish pseudo-membrane, tinged with blood or small clots, at times. The ulcer is surrounded by membrane whose natural luster is dimmed, which looks reddened and velvety, and whose bloodvessels are lost in the intense injection prevailing.

Clinical Evidences.—The clinical evidences may be described as those giving rise to (a) suspicion; (b) confirmation; (c) conviction. Suspicion of vesical tuberculosis should be aroused by persistent and apparently inexplicable frequency of urination, either by night or day or both, together with the appearance, over long periods of time, of blood-cells in microscopic quantities, in the urine. In the later stages pain and harassing suffering, day and night, with interruptions or loss of sleep and lowering of nerve stamina, mark the more serious phases of the disease. Persistent or recurrent bleeding from the ulcerated areas is apt to take place, adding to both, mental and physical depression. But of much more importance, from the diagnostic standpoint than this, is the persistent appearance in the urine of red cells *in microscopic quantities* in the *early periods* of the infection. It is important *because it is early*, furnishing the medical attendant the grounds for suspicion that, if recognised and followed up, enables him to recognise the disease at the earliest possible moment, which is, of course, all-important. But I have found in numerous instances that this feature was not recognised or even suspected because examinations of the urine were not sufficiently careful or searching. Such urines are often limpid clear, and from the microscopical standpoint as far above suspicion as Cesar's wife could have been; yet, when searched after prompt and thorough sedimentation are found to contain large numbers of red cells, present in every specimen voided. Frank hematuria may become one of the outspoken danger signals later, when inflammation or ulceration is established.

Pain is either spontaneous or excited by the act of urination. In the latter case it is most intense at the end of the act, aroused by the squeezing of the inflamed and ulcerated areas by the vesical sphincters. Pain of this character is almost a constant attendant, at one period or another, on the tuberculous bladder, and often becomes so severe as to precipitate the patient into cocaine or morphine addiction. But while this is true, another allied symptom is even more characteristic of the disease, that in itself alone often elicits the suspicion of tuberculosis: that is, excessive tenderness and hypersensitiveness to manipulation. Appreciation ing, though possibly the right carotid might have been tied as

of this fact should lead to the free use of local anesthesia for making any local investigation.

In health the desire to urinate is aroused by irritation of the mucous membrane of the prostate, urethra, or neck of the bladder. Any irritation applied at this point will arouse desire to urinate. When that irritant is urine from the full or over-filled bladder, the result is physiological desire to urinate, that passes off when the bladder is evacuated; when the irritant is tuberculous inflammation or ulceration, there is good reason for the persistent and intense desire to urinate that so frequently accompanies this condition, even in the presence of a comparatively empty bladder. This fact is contributed to by reason of the frequency with which the neck of the bladder is the part especially involved. Sometimes the frequency is due to reflected irritation onto the neck, rather than direct inflammation there, as for instance from renal tuberculosis, which occasionally causes frequency before the involvement of the bladder.

Among the characteristic signs of vesical tuberculosis is a marked diminution in the capacity of the bladder (contracted bladder). From three to four ounces is a fair average capacity for such bladders; due to infiltration and thickening and lessened elasticity of the walls.

A peculiarity noticeable is that in the face of this condition and the prolonged inflammation prevailing with it, the urine is liable to be acid in reaction. The introduction of the proteus group of bacteria sets up ammoniacal fermentation that alters this, however, establishing alkalinity and adding to the subjective complaints and activity of inflammatory processes.

Mixed Infections.—In addition to the tubercle bacilli found in tuberculous cystitis, other organisms are sometimes present and take an active part in the pathological processes. Some of them have something to do with the inauguration of the tuberculous infection, while others are followers of the tuberculous infection, adding their quota to the miserable conditions prevailing. Many cases of urinary tuberculosis have been observed as followers of urethral gonorrhea; while streptococci, staphylococci, colon bacilli and other organisms have been found as companions of tubercle bacilli. It is considered probable that pyogenic organisms lower the resistance of the mucosa and produce minute breaks in its surface, allowing the tubercle bacilli to enter the submucosa. On the other hand, it is thought that cystitis caused by members of the proteus group does not offer so fertile a field for the invasion of tubercle bacilli as that produced by streptococci and gonococci (Walker).

Diagnosis.—While the characteristic symptoms and signs given may be sufficient to give rise to suspicion and even confirm-

ation of the suspicion of tuberculosis cystitis, in other words, a presumptive diagnosis of that affection, the crucial factor for determining the diagnosis, as with tuberculosis of other parts of the body, is the demonstration of the tubercle bacillus in connection with the convincing evidences of inflammation of the bladder. The appearance of tubercle bacilli in the urine does not by any means necessarily indicate vesical tuberculosis, as it has repeatedly been proven (Israel, Jani and Nakarai, Thilicwicz) that tubercle bacilli may float in the urine of persons whose urinary tract is innocent of any pathological lesion, even as demonstrated post mortem.

The finding or identification of the tubercle bacilli in the urine is not always easy or possible and is largely dependent on accompanying conditions, the age and extent of the lesions, the mode of search carried out, and the like. The bacilli may be sparse in number and on that account escape detection by the ordinary methods. Bryson called attention to a useful procedure in this connection—namely, the draining off by sterile catheter of the small amount of urine left over after voluntary urination, as offering a better probability of gathering the bacilli that have settled at the bottom of the ladder.

Differentiation Between Smegma and Tubercle Bacilli.—Much thought and research have been spent in the endeavor to find a method of definite differentiation by the microscope between the smegma and the tubercle bacillus. Many different staining methods have been evolved. I have seen some serious errors result from relying on such methods. I believe it is much safer and better to pay no attention to them whatever, but to make the differentiation by excluding the introduction of smegma bacilli in obtaining the specimen. It should always, where possible, be obtained by sterile catheterisation, in either male or female, after thorough cleansing of the external genitals. In the female one must be especially careful even then, as the urethra is short enough to permit of the introduction of smegma bacilli on the catheter as passed into the bladder.

Sedimentation should be effected promptly after the passage of the specimen, and should be thorough. Trevithick recommends that the supernatant fluid be poured off from the first sediment obtained, and the tube be refilled with water and re-sedimented. This is supposed to favor the adhering of the bacilli to the glass slide or cover-slip. A number of staining methods are of value, the carbol-fuchsin retaining the esteem in which it has long been held.

Failure to find bacilli in the specimen, even after several essays, does not prove their absence, and merely stands as negative evidence; it must be supplemented with the more accurate

mode of guinea-pig inoculation of the urinary sediment. This is reliable and extremely valuable—much more so, in the writer's opinion, than the hypodermic tuberculin test. But it requires from two to three weeks' time for maturing.

Cystoscopy.—The other necessary factor for fixing the diagnosis of tuberculous cystitis is the picture presented by the cystoscope.

The writer desires to express himself as decidedly opposed to the rather broadly disseminated view that urinary tuberculosis means interdiction of the use of instruments, either for diagnosis or for treatment. While due conservatism should be exercised in this regard, the idea that it is a forbidden field should be abandoned. That idea is no more applicable here than in other conditions requiring the ministrations of surgery and medicine. It has been observed in a number of cases of severe urinary tuberculosis that the repeated use of the cystoscope, together with ureter catheterisation and other forms of instrumentation, have not retarded or interfered with progressive improvement or even recovery. In some instances, indeed, such measures themselves were followed by distinct improvement, sustained in repeating them. I have never yet observed any complications or serious consequences from such manipulations, though they are restricted always to the necessities of the case and not used in a meddling way.

The writer has been much gratified to observe participation in this view by Willy Myer (*New York Medical Journal*, April 27, 1907), who says:

Cystoscopy of the urinary tract has always been a subject of great interest to me, and I look upon it as a valuable diagnostic aid. I was somewhat surprised, therefore, to note the opinion expressed by a few colleagues that this examination as well as catheterisation of the ureters is contraindicated in patients afflicted with this trouble (tuberculosis). In all my cystoscopic experience, extending over a period of just twenty years, I have never seen cystoscopy cause direct detriment to these patients, and I feel it never should, so long as the instruments are gently and judiciously manipulated. I would therefore state right here that I consider cystoscopy not only permissible but in most of these cases absolutely necessary, in order to enable us to establish a definite diagnosis.

While characteristic lesions, such as have previously been mentioned, are shown by the cystoscope in tuberculous inflammation and more especially ulceration of the bladder, it can not be said that the lesions are always typical, or that they adhere to hard and fast lines of development. On this subject Casper (Bonney's translation, p. 224) says:

In general, tuberculosis of the bladder does not present a specific picture. Besides diffuse swelling and redness there are at times deeply congested localised areas clearly separated from apparently healthy tissue, while again ulcerations having nothing distinctive about them are seen. Tubercles are very seldom found.

Fenwick (Clinical Cystoscopy, page 172) says:

The primary (early) deposit is detected on the posterior wall in two forms, either diffuse, as a dull red patch or patches, or localised, as a single ulcer to the inner side of the ureteric orifice. The dull red patches betoken extravasation and exudation. I have sometimes met with cases in which a solitary ulcer was seen to the inner side of the orifice and I could not distinguish its appearance from the solitary simple ulcer.

Ureteral Orifices.—Besides the oval or rounded ulcers with sharp edges, perhaps undermined, with roughened, raw and bleeding surfaces, surrounded by a zone of congestion, of velvety appearance, lacking the natural luster, with other areas of congestion either localised or diffuse—besides these characteristic appearances of the bladder mucosa itself, the ureteral orifices themselves ordinarily but not invariably present characteristic features in connection with descending tuberculosis. These have been especially well studied by Fenwick, who says (*ibid.*, p. 174): "One of the ureteric orifices is attacked before the other; both are never attacked equally. The orifice of that ureter on which the stress of the disease first falls changes in contour, its lips thicken, and it becomes caked and patulous. The same changes will be found in the corresponding renal pelvis, with implication of the lower part of the kidney." The same author says that where the vesical implication is a descending one from a tuberculous kidney that retracts under the ribs, the ureter becomes stretched (tense), the vesical orifice of the ureter becomes *displaced*, elevating the trigonal angle of that side and perhaps presenting a funneled appearance there—furnishing a diagnostic sign of material value. Instead of being an inch and a half from its fellow and the same distance from the urethral outlet, it is found to be as much as two inches from either opening, and is drawn both outwards and upwards.

While the positive evidence thus presented by the appearance of the ureteral orifice should be given its full meed of credit as an indicator of the condition of the kidney above it many authors go still further and accept its negative evidence with as great confidence. They declare that if the ureteral orifice is normal in appearance there is no necessity of looking further for evidence of tuberculosis of the corresponding kidney; they give it a clean bill of health on that ground alone.

Others, again, accept with equal complacency the cystoscopic appearance of the urine as it is being emitted in jets from the respective ureteral openings, saying that if either jet is cloudy or bloody it means that the corresponding kidney is the one at fault. The acceptance of such flimsy and untenable evidence can only result in discrediting and defaming a procedure of the highest scientific value. Kidneys saturated with tuberculous infection have been removed from patients whose ureteral orifices showed no indication whatever of the renal trouble, and if it be true that urine macroscopically clear and to casual inspection healthy, can contain pus cells, red blood cells and tubercle bacilli, the cystoscopist must be expert, indeed, to detect these in the jets of urine issuing from the ureters.

The reliable, safe and secure mode of arriving at the determination of implication or health of the respective kidneys is that by ureteral catheterisation and minute investigation of the urines drained thereby. There are no well grounded objections to the procedure, and the information it furnishes is not illusory or misleading. Much time and printer's ink have been spent in the endeavor to prove that ureteral catheterisation is dangerous because of its liability to convey infection into a healthy ureter. If this objection were tenable it would have had plenty of evidence ere this to justify it, but such has not been the case; and of the many thousands of ureteral catheterisations, none have been reported as leaving such a heritage.

Segregation does not compare with it in any respect. It is both unreliable and inefficacious, leaving no material reason for its use.

Lymphoid Tubercle.—A peculiar formation occasionally seen in the bladder either in the presence or absence of tuberculous infection, is a deposit of lymph in the form of lymphoid tubercle. These little tubercles, yellow and prominent, dot the surface of the vesical membrane in a manner that is startlingly like the tubercles from Koch's organism, but with which they may have no relation. Alexander describes the condition under the term, nodular cystitis. Kneise in his *Handatlas der Cystoskopie*, 1908, Table V., No. 22, gives a beautiful illustration of the condition, which shows very well also the chief differentiating features between these and real tubercles. there is absence of the zone of inflammation and extravasation that habitually accompanies true tubercle. In a case observed post mortem by Dr. Mark and Dr. Hall, of Kansas City, the pseudo-tubercles were scattered over the entire bladder mucosa, but this is exceptional, as they ordinarily affect only the trigonal neighborhood.

It is evident, therefore, in connection with cystoscopy that while seeing is believing, and the cystoscopic picture is essential

and all-important, it must be correctly seen, appreciated and interpreted; and conclusions from it should be made only after due consideration of the clinical history and general features of the case.

The "therapeutic test" is a means which, applied either inadvertently or intentionally, gives a fairly good indication of the tuberculous or nontuberculous nature of a vesical inflammation. Nitrate of silver solution, nearly always gratefully received by the infected bladder, arouses prompt additional irritation if the cystitis is of tuberculous origin.

The tuberculin test of inoculation should have a place here as elsewhere in bearing testimony on the presence or absence of tuberculous infection.

The final definite diagnosis must after all occasionally be made without the demonstration of the tubercle bacillus and in spite of indefinite cystoscopic findings, the other indications present being taken as sufficient to justify a conclusion. One sometimes *feels* that he is in the presence of tuberculosis, without being able to elicit the distinctive, individual evidences desired. Then, too, the condition of other organs of the body, whether tuberculous or not, may have a serviceable bearing on the question.

Treatment.—General considerations. The treatment of tuberculous cystitis may be divided into palliative and curative: by means of hygienic, systemic, local and operative measures.

Since this affection is a secondary one, with the original focus situated at some other part of the body—in most cases the kidney—the *curative* plan usually involves an operative attack with removal of the original focus.

The modes of treatment may be divided as follows:

1. General, systemic and hygienic measures.
2. Tuberculin treatments.
3. Operative attack on the original foci of the infection.
4. Operative attack on the bladder: (a) extirpation of the bladder and transplantation of the ureters; (b) curetting or cauterisation, or both; (c) local application of bichloride or carbolic solution; (d) drainage of the bladder by fistula.
5. Local applications to the bladder: boric acid irrigations, bichloride instillations, injection of iodoform oil or other soothing, antiseptic medicaments.

6 Cystoscopy and ureteral catheterisation and application of medicaments through them into the ureters and renal pelves.

General Hygienic Measures.—The various systemic and hygienic influences suitable for tuberculosis in general are indicated, and it would be supererogation to rehearse them here. While in entire harmony with the belief that these are of prime importance

and must be supplied in each instance, I do not participate in the belief that they must be attained at all hazards; in other words, I am of opinion that so much good can often be accomplished by local operative measures that these should not be sacrificed merely for the purpose of going away for "good air" and ideal hygienic influences. This is in opposition to the doctrines of certain writers, I know, but experience has brought me to that conclusion.

Creasote and guaiacol in full dosage are often beneficial; likewise various systemic tonics that are nonalcoholic. The formaldehyde group of medicaments (urotropin, cystogen) is contraindicated; they afford no service and are often highly irritating.

Tuberculin Treatment.—Tuberculin treatment occupies the same position here that it does with reference to tuberculosis of other parts of the body, and should be prescribed under the same regulations. The dosage should be minute and short of producing the marked and injurious reactions prevalent in the earlier use of this remedy.

Operative Treatment.—Operative attacks embrace: (a) nephrotomy and partial resection of involved kidney tissue; (b) nephrectomy; (c) ureterectomy; (d) castration or epididymectomy; (e) vasectomy; prostatectomy; (f) removal of seminal vesicles.

Partial resection of a tuberculous kidney has proved a false hope and has been abandoned. It does not secure the removal of all of the original focus.

Experience in manifold instances has proved the justification of removing the kidney, if it be the originating factor, with possibly the corresponding ureter if seriously involved. This is also true of the removal of the worse of two tuberculous kidneys, in certain instances, relieving the sufferer of a suppurating and infected organ that is doing no good but is undermining the health and inciting infection elsewhere. It is well established that bladders the subject of tuberculous inflammation and ulceration are reclaimed from their unhealthy condition by these measures and undergo definite reparative changes, the ulcers heal and inflammation ceases.

Certain authors lay much stress on the removal of the entire ureter, in addition to the kidney, where it is affected, insisting that if any of it be left behind it will necessarily prove a source of renewed infection later. This latter claim has not, however, been established. As already mentioned, the tuberculous bladder is able to clear up and regain its health after removal of the primary focus, a kidney; why not the ureter as well? While it can not be denied that it is theoretically better to be rid of a tuber-

culous ureter, its removal in very serious cases cannot fail to add to the duration and perhaps difficulty of the operation, possibly to the extent of compromising the chances of the patient's going through it successfully. In view of the doubtful advantage gained is it advisable to run the risk in all instances? I confess my own leaning to the negative side of the question. Two years ago, acting on this reasoning, I removed the left kidney of a young woman who was so debilitated in health and strength that the several medical attendants were united in the belief that she could not withstand the combined operation of nepliro-urterectomy. The ureter was left behind; the patient, though in a precarious condition for several days, recovered. Her bladder has since been relieved of both inflammation and ulceration; the ureter of that side has become obliterated, discharges nothing and is not even patent to a catheter. The patient has gained about thirty pounds and her general health appears restored. For a time after the operation there was tenderness along the line of the affected ureter, but that passed away, giving no further trouble.

Graphically portraying the favorable progress that has been made in the past twenty years by improved surgical technic and more prompt and definite diagnosis, the estimates of mortality of nephrectomy for tuberculosis as given by the following several writers and operators at different periods may be cited:

In 1890 by Brodeur, 58 per cent mortality; 1893, Palet, 40 per cent.; 1902, Pousson, 29.4 per cent.; 1902, Schmieden, 31.3 per cent.; 1905, P. Wagner, 24.5 per cent.; 1907, Blum, 13.3 per cent.; 1908, Blum, 11.1 per cent.

The same author (Blum, loc. cit.) has formulated the contraindications to nephrectomy to the following effect: (1) unduly advanced age of the patient; (2) the presence in the patient of general miliary tuberculosis; (3) the co-existence of malignant diseases of other organs, of diabetes of serious degree; (4) advanced pulmonary tuberculosis that offers little hope of recovery; (5) widespread tuberculosis of the genitals with the bladder included.

Counterindications.—The justification for operating on or removing the testes, epididymes, vasa deferentia, vesicles or prostate, when they are original foci, seems to be not yet established for all cases, and there is no such uniform sentiment here as there is with respect to the removal of the kidney. So much can be accomplished by general and hygienic measures that it would seem desirable to first adopt these in such cases, and defer any mode of operating until its necessity is demonstrated by persistence or rapidity of development of and extension to other organs. Factors present in individual cases will have much to do with determination of the question.

Operative attacks on the bladder, except for palliative purposes (for necessary artificial drainage, etc.) are, on the whole, illogical and have little to recommend them. The secondary nature of the affection explains this fact.

Local Applications and Treatments.—Any local measures adopted should be as little irritating as possible, and while instrumentation should be reduced to a minimum, that does not preclude the use of the catheter or the cystoscope when they are needed. Obstructive conditions of the urethra should be remedied, securing free and easy transit for the urine, for which dilating methods are preferable to cutting.

Irrigation of the urethra and bladder are often serviceable where there is secondary infection. Much has been claimed for bichloride instillations, by the French school particularly, and Rovsing has lauded the effect of introducing strong solutions (5 per cent.) of carbolic acid into the bladder, but my personal experience and the reports of others are adverse to such heroic, irritating methods. The most serviceable local application I have used is oil emulsion of iodoform, say, a dram to the ounce of some bland oil, such as liquid vaselin. It is injected once daily, after emptying the bladder, and the patient is instructed to retain it as long as practicable, not expelling the "last drops" in urinating. The writer has used the same emulsion as an injection into kidney pelvis affected with tuberculosis, and apparently with much benefit, in several cases. A male patient who has been under observation for four years and was formerly severely afflicted with the various effects of vesical and left renal implication, has never been subjected to operation but has devotedly carried out all hygienic and local measures advised. He at first received a number of injections of the iodoform oil into the pelvis through the ureteral catheter, and has himself used the vesical injections of the same. In the period mentioned he has not only been relieved of all of the acute symptoms, the pain and frequency of urination and the like, but has regained much weight, strength and faculty for active employment. Test of his urine by guinea-pig inoculation recently failed to disclose any evidence of the tuberculous infection.

Instances of improvement or conditional recovery under non-operative measures are not unique in my experience. They are of sufficient number to give rise to a serious question as to whether all such patients should necessarily be subjected to operation on discovery of a moderate nidus of infection in one kidney, with possibly beginning of involvement of the corresponding ureter or the bladder. I believe I should rather make haste slowly and first try the effects of the local and hygienic measures to demonstrate the extent of their benefit. Meantime the patient

will probably be brought to a better condition for operation if it prove necessary than he was before the institution of those measures. Where there is serious involvement of a kidney, the status is entirely changed and the sooner it is removed the better.

Palliative Operations.—In some instances the pain and irritation from tuberculous inflammation are so excruciating that some operative plan has to be adopted to alleviate the distress, if nothing more. The one usually favored is that of establishing a suprapubic fistula, permitting continuous drainage of the bladder into a rubber receptacle which covers the opening. To the same end, Simpson suggested resection of the sensory nerves that come off from the third and fourth sacral trunks, and Watson has advised double lumbar nephrostomy, for the purpose of draining the urine directly from each kidney and not permitting its descent into the bladder.

1050 CENTURY BUILDING.

Guess Work in the Practice of Medicine¹

By B. C. LOVELAND M. D., Syracuse, N. Y.

IN selecting a subject for this paper my mind ran over the various cases which have recently been of unusual interest to me, but after considering the matter carefully, I became convinced that a paper with the above title would give me an opportunity to say something which might be of more value to the profession than any dissertation I might make on any special disease or mode of treatment.

A number of years ago I became familiar with a maxim which runs: "A thing that is worth doing is worth doing well."

Applying this principle to the practice of medicine, I was led to believe that when I was consulted by a patient for a complaint, no matter how apparently trivial the complaint might be, I was consulted with the hope of securing relief from the complaint, and that it was clearly my duty to give the matter sufficiently serious attention and investigation to secure the desired result when such was possible. The case might be as plain as a boil on the end of the nose, and might take but a moment to make a diagnosis and outline treatment, or it might be some obscure internal condition, the correct understanding of which would require much time, and thought, and possibly more than one interview.

The apparent gravity of the case should not alter the conception of duty, and in any case nothing which would add to positive knowledge of the condition should be overlooked or left

1. Read at the forty-first annual meeting of the Medical Association of Central New York, held at Buffalo, October 27, 1908.

undone, and nothing left to guess work which could possibly become positive knowledge. The physician, then, should not be governed by appearances alone, or because he is busy simply listen to a story of suffering, more or less clearly told and at once conclude to give the patient a tonic or a little pepsin, then show the patient out of the office with the remark: "I think this will help you out. If you are not all right in a day or two come in and see me again." This does not fulfil the physician's obligation to his patient. It is this kind of try-this-and-if-you-do-not-get-better-come-again prescribing that this paper is directed against.

But you may say such prescribing represents a practice most infrequent in the medical profession, and only then in things either absolutely plain, or insignificant in importance. I contend that the boil on the nose may not be so simple as it looks, for it has more than once led me to an investigation which disclosed diabetes, and no man can say that a thing he has only observed superficially is or is not insignificant.

I am ready to admit also that occasionally a patient is to blame for the superficial attention given by the doctor, as an instance I will relate shows: July 13, 1901, I was consulted by Mrs. N. She told me she was troubled with dyspepsia and wanted me to give her something for it. She was 60 years of age and looked poorly nourished, said her bowels were all right, but she had some trouble with gas in her stomach after eating. I told her I had little use for guess work, and that before prescribing for her it would be wise to make a physical examination. She objected, possibly fearing an extra charge, but said "I am not sick enough for that. Just give me something and if I do not get better I will come and see you again." I did as requested, gave her something that I thought would help her, and a week later she reported better and wanted some more of the same medicine. After this I heard nothing for about a month when I was called to her house to find her very ill with an exhausting diarrhea, nausea and vomiting, both limbs edematous, and confined to bed. She had been away at a sanitarium where she expected to remain through a month or so of the hot weather, but after a hot bath or two she was completely prostrated, and her bowels began to move six or eight times a day as when I saw her. After nine days of this she was brought home in arms. Now there was very little opposition to a reasonable investigation and I found her heart showed a mitral regurgitation with lack of compensation. Her liver was acutely congested and slightly enlarged. Her edema was due to these conditions. She had no albuminuria. She was tympanitic and tender over the whole extent of the abdomen. I will omit details of treat-

ment as that does not come within the province of this paper, simply saying that she made a slow and tedious recovery, though permanent up to the present; but a proper study of her case at the beginning would have shown the heart lesion, the liver condition already begun and would have probably brought out the fact that her intestinal function had not been properly performed for months or perhaps years, for later it developed that she had had periods of costiveness alternating with periods of diarrhea for years, and that was what she called "all right" when I first questioned her, and this was but a step to chronic diarrhea. Such a frame of mind on the part of a patient is not unique, and frequently any reasonable insistence on the part of the physician will not change it. It is wise, however, to demand an opportunity to find out what the matter is before prescribing.

There is another class of patients whose troubles do not pre-
 sage imminent dissolution, but who suffer much of many physicians, like the woman in the Scripture, and who often drift into a deplorable state before anyone takes sufficient time or interest in them to make a careful study of their troubles and set them on the right path again. This is the class which particularly excites my interest, and which has prompted this paper. An example or two of this sort will be briefly reported here for purposes of illustration.

MRS. F. B., widow of a physician who had practised in a neighboring town consulted me on September 5, 1902. She was 65 years of age, had suffered with eczema for 20 years, was very thin, poorly nourished, and of a peculiar purplish brown complexion. Her eyes were much congested, and there was a phlyctenular ulcer on the margin of one cornea. Her bowels were loose, each movement being preceded by pain in the region of the navel, and followed by a feeling of great exhaustion. At other times she felt comparatively well and strong, though she had for years shown a bad color and suffered much as described. After taking her history, I requested a physical examination, to which she readily consented, and found a general entropsis, the lower border of the stomach being on a level with the umbilicus, the right kidney nearly down to the pelvic brim, a sensitive liver, but no organic trouble. At this time she told me that she had consulted a large number of physicians in a number of places, and no one had ever made a physical examination, the nearest to it being when a physician in New York asked her to lie on a sofa in his office and palpated over her abdomen, without asking her to loosen or remove any of her clothing. With this item of history in mind, it was not strange that she had "doctored twenty years with no material benefit."

Her improvement under appropriate treatment was fairly satisfactory, apparently quite satisfactory to her, for up to the present time she says she is "very well," though she still retains much the same bad complexion.

MRS. C. E. B., 38 years of age, called on me July 23, 1908. She was the mother of two children, the youngest 15 years old, had one miscarriage ten years ago. Father alive at 72 years of age, mother died of tuberculosis at 41. Thirteen years ago she began to feel as if her throat and the passage up to her right ear was closing up, "and it made her very nervous." Her family physician not succeeding in giving her relief, she consulted a laryngologist who did some operation in her throat. She said "tore loose a spasmodically contracted muscle." No beneficial results following, she consulted another laryngologist who operated on both inferior turbinated bones, and inflated her Eustachian tube several times with no benefit. Then she went to another laryngologist who told her that no more operating would benefit her, and after a few visits said he could not do her any good, and under the circumstances did not want to run up a bill against her. Later, discovering a swelling in her breasts, became convinced she had cancer, and both breasts were amputated, successfully, no cancer returning. Her old trouble in the throat still continued, and she tried other specialists, oculists, osteopaths, and finally another surgeon who recognised that the case was out of his province and sent her to me. An examination disclosed no trouble in the throat, nose free on both sides, though she felt as if the right nostril was closed, no sign of return of growths in territory invaded by the operations on her breasts, a very poor nutritional state, normal reflexes, and station, though she complained of a feeling of tremor and dizziness. Pulse 100. Pressure with the finger on the right carotid gave relief to the choking sensation and also the feeling in the right ear and nostril, which remained while pressure was continued. She was constipated and suffered from cold extremities, so that she was sleeping under heavy blankets in the hottest summer weather, and her mental state was such that her troubles were constantly uppermost in her thought and conversation. When I tried to direct her attention to such physiologic helps as would build up her physique, and at the same time divert her attention from her throat I found that her throat was the center around which her whole life revolved, and she "would stand anything" if I could only do something which would stop that feeling in her throat.

Now this is the class of cases which furnish material for christian science, mind cures and Emanuel movement clinics and if their true character was recognised before too many physicians and surgeons had failed to bring relief, but succeeded in producing a general loss of confidence on the part of the patient in the practice of medicine in general, the proper psychotherapeutic measures might be applied without waiting for the various medical excrescences to bring relief, and much to the credit of our good reputation as well. It should not require a neurologist to recognise the hysteria in such a case, and it is gratifying that at least two specialists turned her away without further operat-

ing, though possibly the right carotid might have been tied another experiment in hope of relief. But I might say here that I do not approve of operative treatment of non-surgical disorders such as hysteria.

Since I began to write this paper, I heard a physician say in one of our hospitals that to make a successful practitioner, a man did not need much knowledge of anatomy, or pathology, or even to be a good diagnostician. All he needed was to know how to manage his patients. While I was willing to admit the value of being able to manage patients, and that a large number would recover anyway as he said, I had a very different idea of success than the remark quoted would imply, and asked him what of that relatively small number who will not "get well anyway?" He said "They will die anyway." But such is not the case, for many persons live to become chronic invalids for years, who with a correct diagnosis and proper management ought to be useful men and women.

I think this is sufficient in the way of illustrations to show the kind of practice of medicine this paper is directed against, that is, a practise marked by carelessness, indifference, inefficiency and guess work. That this kind of practise is all too common, and works discredit to our profession is a matter of daily observation, as much of my work is with patients who have been ailing and doctoring for months or years, often with many physicians. This discredit to the medical profession is not the result of the occasional disastrous result to the patient, for it is proverbial that when one is dead he is soon forgotten, but it often happens that a person lives and goes round saying "I doctored six months with Dr. So and So, one of your leading physicians, and was no better but rather worse at the end of that time," or as mentioned before, "I have been from doctor to doctor for five years, and one after the other has told me to try this or that, and none of them have really helped me, and no one has ever carefully examined me. I think they did not know anything about my trouble but were just experimenting."

These are the things which breed lack of confidence on the part of the public, prevent proper medical legislation, and foster the growth of every ism and pathy, and furnish a field for the quack, and advertising charlatan who announces "consultation free and a positive diagnosis of your trouble." I hope I shall not be misunderstood as arraigning the whole profession in this regard, for that is not my intention, and I believe that no more careful and conscientious body of men exists than our profession as a whole, yet the evil mentioned is sufficiently common to make a point for my paper, and it is in the interest of that large body

of careful workers that this subject is discussed, for the general medical body suffers more or less, as does the human body, when any member suffers, or imperfectly performs its function.

402 EAST GENESEE STREET.

An Interesting Case of Dermatitis Exfoliativa

By WILLIAM A. HOWE, M. D. Phelps, N. Y.

THE case which I am desirous of bringing to your attention today, had its inception in March, 1895. It again manifested itself in January, 1900. These two attacks were incorporated in an article which I was privileged to present to this society on October 16, 1900, and were subsequently published in the BUFFALO MEDICAL JOURNAL in February, 1901. Since January, 1900, the same patient has suffered two further attacks, one in December, 1907, and the other in July, 1908.

It is these recent relapses which have induced me to supplement my former report, and still further record my latest experience with this rare and highly interesting condition.

The symptoms from which this patient suffered differed more in degree than in character. In the first two attacks he was profoundly ill, in the third he remained in bed only a few days, while in the fourth he scarcely kept the house.

Inasmuch as his local and general symptoms were so fully set forth in my former article, to which reference has been made, and since you will find the symptomatology of this disease comprehensively discussed in our more recent textbooks on dermatology, it seems rather unnecessary for me to repeat them here, thereby needlessly prolonging this report. Notwithstanding the wide range of constitutional and local symptoms, which he exhibited, the characteristic desquamation of the epidermis was in each instance much the same in its extent.

Not so, however, in the damage done to the deeper tissues. Here the more intense the dermic inflammation and the longer its duration, the more serious and lasting was the damage done to the subepidermal tissues. In spite of the fact that for thirteen years he has been a periodical sufferer from this strange malady, his skin, while rather dryer and rougher than that of the average individual, is far from the condition in which you would naturally expect to find it. Between these relapsing attacks he apparently enjoys the best of health.

One subjective symptom, not mentioned, so far as I know, in any of our textbooks, has been that of gastro-intestinal fermentation, accompanied with a great deal of flatus. While not wishing to attempt the etiological consideration of this disease, the uni-

formity and persistency of this prodromic symptom, in my case, has been such that I should not be justified in omitting its mention. Possibly it is simply coincident, and yet it may, at least be suggestive of an autointoxic condition, most potent in its bearing, to the ultimate solution of the much disputed cause of this obscure affection.



HOWE: DERMATITIS EXFOLIATIVA. FIG. I.

But this case has appealed to my interest, not so much on account of its subjective or general symptoms, as from the rare specimens, which have been collected throughout its course.

The specimen marked No. 1, was taken from this patient in January, 1900. It is possible that some of you may recognise it as being one of those which I exhibited in Rochester, when I first presented this case. Since then, it has been kept in an ordinary paste board box, and though more than eight years have elapsed, it is, as you will see, in a perfect if not a permanent state

of preservation. This has evidently arisen from the completely desiccated condition of the epidermis when it was exfoliated.

While you will notice that only one specimen is shown from this attack, you will further observe from the photographs marked No. 1, 1900, that both hands and both feet were equally involved.



HOWE: DERMATITIS EXFOLIATIVA. FIG. II.

The specimens marked No. 2, were secured on December 13, 1907. Like those of 1900, they are very complete and apparently in a lasting state of preservation. At this time, the epidermis of the right hand was turned inside out in its removal, much as you would remove a glove in the same manner.

The exhibit marked No. 3, resulted from the relapsing exfoliative dermatitis from which he suffered in July, 1908. This last recurrent exacerbation, as you will note, followed the preceding one in eight months, for which reason the desquamated epidermis was much thinner and softer than that seen in the earlier attacks.

These last specimens when given off retained for several weeks an appreciable sense of moisture, yet they have never shown any disposition to disintegration and are now in the same fixed state of preservation so characteristic of the earlier ones.

While dermatitis exfoliativa or pityriasis rubra may be comparatively frequent in the experience of the busy dermatologist, I can but believe it is extremely rare to the general practition-



HOWE: DERMATITIS EXFOLIATIVA. FIG. III.

er. Except one acute and rapidly fatal case this has been the only instance in which it has come under my observation in over twenty years of rather extensive general practice. What has been the experience of my hearers? How many of you have seen a case like it and what was your experience with it? In searching medical literature I fail, especially in the several journals at my disposal to find recorded any cases of this strange disease, which has in its existence so many possibilities.

During my patient's last illness, he was given a newspaper clipping, with an account of a similar case in Trenton, N. J. Up-

on his urgent request and to satisfy my own desire, I wrote to the gentleman whose name was given in the paper. Within a few days thereafter I received from him a most interesting account of his sickness. While not at liberty to use this gentleman's name, I can, with no violation of trust, briefly quote his case. I am moved to do this that one more case may find its way on record, hoping thereby to arouse a little extra interest in the study of this



HOWE: DERMATITIS EXFOLIATIVA. FIG. IV.

malady, which is not only so mysterious in its etiology but, thus far, absolutely unyielding to any known method of treatment.

CASE No. III.—W. U. C., male. While his mother told him he had it when a child his first recollection of having had it was in 1867. It did not trouble him again until 1879, since which time he has had eight attacks, varying from three to eight years apart. Its advent is generally ushered in with a chill, after which his hands and feet begin to swell, and his whole body turns a deep red. This redness lasts from six to forty-eight hours, after

which an intense itching comes on and lasts until the skin of his hands and feet comes off. Extreme prostration is another symptom from which he complains. He further claims that quinine sulphate, grs. iv., or a small dose of belladonna, will excite an attack at any time. No other member of his family, nor any of his grandchildren have ever been afflicted with it, and he is positive that there is nothing about it that is in any way contagious. He further adds that after more than forty years of experimentations and disappointments with doctors, he has been forced to believe that none of them know anything about the disease or any relief for it.

He kindly enclosed a specimen of epidermis, which was removed during one of his attacks. This you will find among my other exhibits, so marked as to identify it from those of my other cases.

67 E. MAIN STREET.

CLINICAL REPORTS.

Presentation of Specimens¹

By J. HENRY DOWD, M. D., Buffalo, N. Y.

PROSTATIC LOBES.

CASE I. In presenting these two specimens which will speak for themselves (specimens shown), I merely wish to call attention to two or three points. It will be noted the three prostatic lobes weigh 26 drams, the weight of the normal prostate being about 6 drams. These were removed by the perineal route nine months ago and in a report from the patient May 12, 1909, he says: "I can hold my urine from five to six hours and feel as well as when a boy."

After most careful consideration of this subject, summed up from many perineal and suprapubic sections with observation of the cases of others, the writer would express his conclusions as follows:

1. The mortality in prostatectomy is not high, but in many cases the condition following operation is far worse than it was before; I refer to rectal fistula, permanent incontinence, orchitis with suppuration, and the like.
2. Life, although accompanied by slight inconveniences, is usually far more acceptable than death, especially when the condition can be more or less modified and the distressing symptoms relieved by remedies judiciously employed.

1. Reported at the pathological section, Buffalo Academy of Medicine, May 18, 1909

3. Where life is almost a burden, even though the physical condition is bad, and in cases where early operation may prolong life, preventing serious complications, prostatectomy is advisable.

PHOSPHATIC STONES.

CASE II. These five stones which are of the phosphatic variety, weight 1080 grains. They were removed by the suprapubic route, a perineal tube being placed in the bladder for drainage. There was an uninterrupted recovery, in three weeks the patient being able to hold his urine four hours, and only an occasional drop appearing at the suprapubic opening.

It is not so much the fact of the perfect result from operation that I would emphasize, but the prevention of recurrence of such a condition.

This patient's urine before operation was alkaline, having a very low phosphatic index. It is well known that alkalinity favors the precipitation of phosphatic crystals; that we rarely find them in acid urine, in the absence of phosphatic calculus of the kidney or bladder. Acidity of urine is due to the acid sodium phosphate; therefore, to change the urine from an alkaline to an acid reaction is the problem.

The treatment is most happily demonstrated by the phosphatic index,—which in this case was very low. During the stay of three weeks in the hospital the patient's neuroinedic condition was carefully attended to. Examination of the urine four weeks after operation showing acid reaction with the phosphatic index gradually rising, and no crystals present.

40 NORTH PEARL STREET.

A Case of Erysipelas

By G. B. STOCKER, M. D., Buffalo, N. Y.

AMONG the three hundred or more mal-conditions which the practitioner is called upon to treat, there are few which tax his skill more severely than erysipelas. Because of the rapidly progressive and overpowering nature of the infection—its tendency to spread over a larger and larger area of skin surface and to surcharge the system with its toxins—treatment must be administered with dispatch. In a large proportion of cases erysipelas develops because the vital resistance of the patient has been lowered by disease or operation; for this reason the situation is particularly serious—this lowered resistance being a handicap to the patient which may easily prove disastrous.

Therefore, the value of supportive measures becomes apparent. Absolute rest in bed, a nourishing diet, and stimulants of one kind or another are indicated. And later, during convales-

cence, bitter tonics do good service when recovery of strength is slow. Of the numerous special remedies recommended for erysipelas the one that has enjoyed the most favor is the tincture of ferric chloride. One writer speaks of it as follows: "The internal treatment of this disease *par excellence* is the plentiful use of the tincture of the chloride of iron—twenty to thirty minims—well diluted, four times a day." While apparently of some service, this drug is certainly not a specific for the disease and should be withdrawn if it disturbs digestion. The therapeutic status of antistreptococcus serum has not yet been definitely determined, but it has frequently been administered in severe cases with good results.

The application of ichthyol is considered by many practitioners the best local treatment of this disease. It is usually employed in the form of an ointment—20 to 30 per cent.—in lanolin. I have used ichthyol in past years but more recently have taken up the organic peroxide. In the case under consideration this agent proved successful after ichthyol had failed to accomplish good results.

An undertaker who had recently buried a man who died of erysipelas developed, two days later, a bad case of the disease. I was called in and treated the condition locally with ichthyol. A few days after my first visit I was hurriedly called and found the patient with a temperature of 106° and a fresh infection, beginning at the collar line and extending over the entire back, and, also, in streaks, from the shoulder down the chest. The patient could no longer tolerate the odor of ichthyol, he informed me, so, after consultation with Dr. Frank McGuire, who was called in, we decided to try acetozone. We made a solution of the drug—10 grains to one quart of hot water—and applied compresses dipped in this solution as hot as could be borne. These were changed every twenty or thirty minutes and continued all night; in the morning the temperature had fallen four degrees and the sick man was much improved. This treatment was kept up for thirty-six hours. In addition, a mixture of acetozone and collodion was painted on the streaks and along the borders, which procedure seemed to check the infection and to prevent its spread. The patient made an uneventful recovery.

Others have reported equally good results from acetozone after applications of mercury bichloride, ichthyol and other remedies had failed to check the progress of the disease. I believe this drug deserves to be more frequently employed in erysipelas.

901 GENESEE STREET.

SOCIETY PROCEEDINGS.

Buffalo Academy of Medicine

General Meeting, held June 8, 1909.

Reported by HARRY R. TRICK, M. D., Secretary.

Report of the Commission on the Municipal Contagious Hospital:

Your Commission on the Municipal Contagious Hospital herewith presents a summary of work accomplished for the purpose of the establishment of a hospital for Acute Contagious Diseases.

We have at various times enumerated the reasons why such a hospital should be maintained:

1. Because people in fear of quarantine, if sending for a physician allow their children to go unattended; thus a focus of infection may ever be present for the dissemination of the disease.

2. When such cases are thus reported, the Board of Health placards the house; especially for variola, scarlatina, diphtheria, quarantine is maintained; the patient and all living in the same dwelling are isolated.

As at present conducted, quarantine, rigidly enforced without proper facilities for the segregation and treatment of communicable diseases, is a hardship on the following peoples.

1. If a case of infectious disease necessitating placarding occurs where shop and home are in the same building, business is stopped and the source of income is interfered with.

2. If a case occur in a boarding or lodging house, the house is placarded and the business ruined.

3. If a domestic employee becomes infected, the house in which such employee lives is quarantined, the children are not allowed school attendance and the business of members of the family is interfered with.

4. If occurring in the family of wage earners, their means of livelihood is stopped.

5. If occurring in the family of a char woman, the means of livelihood is stopped.

6. If, as so often happens, the disease develops in a tenement, its spread under conditions of crowding and unsanitary environment is great because the enforcement of quarantine is difficult and impossible.

7. Travelers and residents in hotels in the City of Buffalo are at once placed in a dreadful plight; they must leave the hotel within an hour's notice or the hotel is placarded; the law forbids them to hire a public conveyance without first notifying the owner of the conveyance of the purpose for which it is to be used; the law forbids them to leave the city or to go upon the public streets or in public places; they are not allowed to receive visitors.

A summary of the Medical School Examiners' work from September, 1908, to May, 1909, shows that 1881 children were excluded from the schools, and that 8,291 were recommended for treatment; that 601 cultures of throats were taken.

Pupils were excluded from the schools for the following causes: scarlet fever, 165; diphtheria, 44; chicken pox, 151; measles, 13; mumps, 21; pediculosis, 253; tonsillitis, 259; diseases of the eye, 103; diseases of the skin, 220; exposure to contagious diseases, 616; miscellaneous, 87.

Does not this table throw an interesting light upon the creation of the present epidemic of scarlet fever?

The cases of scarlet fever and diphtheria reported from October, 1908, to June, 1909, were as follows:

October, 1908, scarlet fever, 326; diphtheria, 136; November, 1908, scarlet fever, 409; diphtheria, 134; December, 1908, scarlet fever, 329; diphtheria, 87; January, 1909, scarlet fever, 410; diphtheria, 115; February, 1909, scarlet fever, 450; diphtheria, 112; March, 1909, scarlet fever, 440; diphtheria, 79; April, 1909, scarlet fever, 343; diphtheria, 41; May, 1909, 258; diphtheria, 33.

We reiterate that it is the exception rather than the rule that quarantine is strictly followed in these diseases under the present conditions.

On February 21, the Board of Health, by stress of an epidemic, converted an abandoned school house (No. 41) at the corner of Broadway and Spring streets, for use in the care and treatment of cases of scarlet fever. Although this hospital is anything but ideal, the good accomplished is very great, and it is no exaggeration to say that since it was opened the condition, so far as scarlet fever is concerned, has much improved. It has demonstrated that the city under the direction of the Department of Health is competent to conduct such a hospital; that the individual cases have been adequately treated; that those in the immediate household of those infected were enabled to pursue their various vocations unmolested, that children in the household did not lose school time.

It has also been demonstrated that the citizens have faith in such a hospital, for no sooner were the doors opened than the children and adults, the rich and poor, a few—the children of prominent physicians—were admitted for treatment. This proves to your commission that our figures, taken from the London Asylum Boards, statistics of the London Fever Hospitals, that if the city establishes a hospital and manages it intelligently, 80 per cent. of all the infectious diseases reported will seek treatment in such a hospital.

The city has further demonstrated that such a hospital can be administered economically, for the ward cases were treated at

about \$1.00 per capita per diem. This is an excellent showing and deserves the commendation of the Buffalo Academy of Medicine.

What has been accomplished by your Commission is as follows: Large bodies of organisations were educated into the belief of the necessity of such a hospital. We can give assurance that the interest manifested by the Erie County Medical Society, the Manufacturers' Club, the East Side Business Men's Association, the Esculapian Medical Club, The Civic Federation of Women's Clubs, comprising some 7,000 of the most prominent women in Western New York and including such clubs as the Mothers' Club, the Nurses' Association, the Women's Investigating Club, the Women Physicians' League, the Women Teachers' Association. Then the United Trades and Labor Council, comprising some 30,000, the Cigarmakers' Union No. 2, the Italian-American Business Men's Association, the Equality Club have shown intense interest for the establishment of such a hospital, and these organizations are prepared to coöperate at any time, should they be called upon.

The petition of the Buffalo Academy of Medicine and the Erie County Medical Society, urging the Board of Aldermen to take immediate steps for the establishment and maintenance of a city hospital for infectious and contagious diseases, after public hearing was acted upon favorably by the Board of Aldermen, the Board of Councilmen, His Honor the Mayor, and the Corporation Council was requested to draft a bill as follows: This bill known as Senate Bill 432, Chapter 116, is entitled: An Act authorising the City of Buffalo to construct, equip and maintain a Municipal Hospital or Hospitals for the exclusive care and treatment of persons affected with infectious diseases, except tuberculosis, to acquire lands therefore, and authorising said city to borrow money for such purpose by the issue of bonds, etc. This bill was passed with the approval of the Governor, March 25, 1909.

This, then, gave the city permission to bond itself for the sum of \$200,000 to acquire lands and to construct and equip suitable buildings for a Municipal Contagious Hospital for the purpose specified in the title of the act.

The Mayer's Commission (consisting of His Honor the Mayor; Mr. Coppins, President of the Common Council; Mr. Weimar, Chairman of the Board of Aldermen; Dr. Bingham, President of the Board of Councilmen; Dr. Porter, Chairman of the Committee on Sanitary Affairs; Dr. Fronczak, Acting Health Commissioner; Col. Ward, Commissioner of Public Works, to whom was referred the details of this proposed hospital), after deciding upon the necessity for a hospital for

acute contagious diseases and after reviewing a number of sites submitted for such a hospital, by unanimous vote, selected a site known as the Best street site (offered by the German Roman Catholic Orphan Asylum for the sum of \$50,000) as in their judgment the best as to surroundings and location for such a purpose.

This site is located near Humboldt Park between West Parade avenue and Wohlers street, having 563.5 feet on Dodge street and 486 feet on Best street, being 597.67 feet deep and containing 7 $\frac{1}{2}$ acres of land.

A recommendation that the city purchase this site for the sum of \$50,000 was therefore sent to the Board of Aldermen. As soon as the selection of this site was made public, a number of property owners in the vicinity of the site offered the following petition, unfortunately headed by a physician also living in the vicinity of the proposed site:

To the Honorable, the Common Council of the City of Buffalo:

We, the undersigned property owners of the vicinity of the Roman Catholic Orphan Asylum, hereby respectfully but vigorously and emphatically object to the proposed erection of a hospital for contagious diseased patients on the tract between Best and Dodge streets, west of Parade Avenue, as such a hospital would be injurious to health and to the value of adjacent property.

We are at a loss to understand why the trustees of the German Roman Catholic Asylum should and would tolerate a hospital of this nature in the immediate vicinity of an asylum which houses hundreds of children of all ages and we, as citizens of one of the most beautiful and respectable portions of the east side hereby oppose any effort to place such hospital at our doors.

Your commission challenges both contentions of this petition as absurd and without the foundation of fact and truth, and as existing as purely fanciful and imaginative due to ignorance or selfishness. Before the Public Hearing held by the Committee of Sanitary Affairs, Dr. Henry R. Hopkins, Dr. Francis E. Fronczak, Acting Commissioner of Health, and the Chairman of this Commission, gave a truthful presentation of facts based upon experience of other cities having Municipal Hospitals, and showed conclusively:

1. That such a hospital is not injurious to the health of those living in the immediate vicinity but that, on the contrary, the zone surrounding such a properly conducted hospital shows fewer contagious diseases reported than outlying zones.

2. That instead of depreciating the value of adjoining property, the land values are appreciably increased. Instead of having a barren and waste piece of land, the landscape gardening which the city will do makes of the place a beauty spot.

Your commission wishes to submit the following letters as bearing upon this important statement:

From Doctor John H. McCullom, Superintendent of the Hospital of the South Department for Contagious Diseases in Boston:

(This is probably as fine a contagious hospital as there exists, and is conducted under the superintendency of Dr. McCullom, an authority on contagious diseases, lecturing upon this subject at Harvard College.)

In reply to your letter, I have to say that in the immediate vicinity of the South Department land in 1893 was assessed at \$1.50 per square foot. In 1908, it was assessed at the rate of \$2.00 per square foot. The assessed value in Boston is always lower than the actual value.

I send you a diagram showing the houses in the immediate vicinity of the South Department. Northampton Street is about 60 feet wide, and it is the back entrance of the South Department. Since the South Department was opened on Northampton street, quite a number of wooden buildings have been torn down, and very good modern apartment houses have been erected instead.

Doctor Robert J. Wilson, Superintendent of Hospitals of New York City, writes as follows:

Replying to your favor and the question as to the depreciation of land values adjacent to the Kingston Avenue Hospital, I have to say that at the time the Kingston Avenue Hospital property was acquired it was a farm in a low lying swamp, and the property round about it was not very valuable, but there were objections raised by the property owners and the city paid certain damages to the owners of property immediately adjoining that of the hospital grounds. In the last three years, since I have been superintendent of the institution, there have been erected within one hundred and fifty feet of the hospital grounds several tenement houses, and within 1,500 feet of the grounds a large number of dwelling houses.

As I stated in my former letter there has not been any contagious disease among the people of these houses immediately contiguous to this hospital. Of course this is a coincidence, but a very fortunate one, which proves that contagious diseases do not spread from the hospital. The very fact that these modern dwelling houses have been built so near is proof positive in my mind that the property is advancing rather than depreciating in value.

I imagine that the information regarding the acquisition of the Kingston Avenue Hospital could be obtained from the city records of the City of Brooklyn, but conditions are not the same as when this property was acquired. The various physicians in charge of the contagious diseases did not recognise the safety

with which contagious disease could be handled in a thickly populated area, if handled as we do now.

I should think that the scarlet fever epidemic in Buffalo this winter must have cost as much as the contagious disease hospital which you contemplate building.

ROBERT J. WILSON,
Superintendent of Hospitals, New York.

The city is pledged to the erection of a hospital for acute communicable diseases. Your commission has been patient and most tolerant of the vexatious delays thus far displayed toward the final accomplishment of what is universally conceded as a pressing necessity.

The present epidemic of scarlet fever will abate, no doubt, with the closure of the schools for the summer vacation, but we predict that it "slumbereth not nor sleepeth," for as soon as the schools are reopened in the fall, contagious disease epidemics, particularly scarlet fever, will continue. Is the will of the people to be dictated by the few? Let the dictum "Buffalo Means Business" be our watchword for the early establishment of a hospital for contagious diseases. Let each member of the profession demonstrate by word and deed our belief that such a hospital is a necessity of the greatest importance for the health and welfare of the citizens of Buffalo.

Let us pray that the Board of Aldermen, the Board of Councilmen, and His Honor, the Mayor, give further proof of their interest by a favorable and speedy action. You do not hesitate to maintain at great expense a Police and Fire Department. These are liberally provided with everything to make their work complete and of value to the public. If these departments are made perfect by liberal appropriation for the protection of our property, why, then, should not that department, whose only object is to protect health and the lives of the whole community, receive as substantial support?

JULIUS ULLMAN,
DEWITT H. SHERMAN,
ROBERT F. SHEEHAN, JR.,
ALLEN A. JONES,
GROVER WENDE.

After reading the report, the following motion was made and carried:

Resolved, That the Buffalo Academy of Medicine request the Mayor's Committee to proceed with the greatest possible speed to purchase the site and begin erection of the Municipal Hospital for Contagious Diseases.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR

WILLIAM WARREN POTTER, M. D.

All communications, whether of a literary or business nature, books for review and exchanges, should be addressed to the editor, 238 DELAWARE AVENUE, BUFFALO, N.Y.

VOL. LXIV.

JULY, 1909.

No. 12

University of Buffalo 1846—1909

THE sixty-third annual commencement of the department of medicine, the twenty-second annual commencement of the department of pharmacy, the twenty-first annual commencement of the department of law and the sixteenth annual commencement of the department of dentistry of the University of Buffalo took place at the Teck Theater, Friday, May 28, 1909, at 11 A. M. The preliminary announcement of the exercises during commencement week was published in the June issue of the JOURNAL. The magazine, however, went to press too early to give the full proceedings, hence we publish them in this edition, thus making the historic chain complete.

THE MEDICAL ALUMNI ASSOCIATION.

This association, organized in 1874, held its Thirty-Fourth Annual Meeting, May 25, 26, 27, and 28, 1909. The program for Tuesday evening, May 25, was as follows:

8.00 P. M.—The classes of '49, '59, '69, '79, '89, '99 met in the college building for organization and registration.

8.30 P. M.—The association transacted routine business and elected officers for the ensuing year.

9.00 P. M.—President Albert T. Lytle, '93, delivered the annual address. Professor Frederick C. Busch, '97, followed with an address entitled, "Modern Experimentation in Relation to Medicine and Surgery."

In his discourse Dr. Busch described his experiments in transplanting adrenals, from one animal to another, obtaining a functional survival of the graft.

11.00 P. M.—A supper and smoker in the college library were served by the association.

The election of officers resulted as follows: president, H. J. Nichols, Bradford, Pa.; vice-presidents, Marshall Clinton, Buffalo; Charles L. Preish, Lockport; Miss N. Victoria Chappell, Buffalo; E. B. Horton, Niagara Falls, and E. A. Forsyth, Buffalo; treasurer, Herman K. DeGroat of Buffalo; secretary,

Franklin W. Barrows of Buffalo, and chairman of the executive committee, Dr. Frederick C. Busch, Dr. Albert T. Lytle, the retiring president, was made a trustee.

Beginning Wednesday morning, May 26, an exhibit of pathologic specimens, preparations, and photographs were arranged in the College Museum under the direction of Professor H. U. Williams, these remaining on view during the entire meeting.

A series of clinics at the Buffalo General Hospital and at the Buffalo Hospital of the Sisters of Charity, were held during Wednesday and Thursday, under the following schedule: Wednesday, 9 to 11 A. M.—Gynecology, Professors Mann and King. 11 to 1 P. M.—Neurology, Professors Putnam and Krauss. 1.30 P. M.—Luncheon served in the college library by the Association. 2 to 5 P. M.—The staff of the Buffalo Hospital of the Sisters of Charity, presented a series of unusual and interesting cases from the various departments, by Professors Hanley, Meyer, Smith, Buswell, Clinton, Dooley, Kaiser, Mooney, Howell.

On Thursday, May 27, clinics continued at the Buffalo General Hospital as follows: 9 to 11 A. M.—Pediatrics, Professors Snow and Sherman. 11 to 1 P. M.—Surgery, Professors Park and Phelps. 2 to 4 P. M.—Medicine, Professors Stockton, Cary and Hopkins. 4 to 6 P. M.—Otology, Laryngology, Professors Hinkel and Cott. 5 to 6 P. M.—Ophthalmology, Professors Howe and Burrows. 8.00 P. M.—Fraternity night.

The program for Friday, May 28, was as follows: 11.00 A. M.—Sixty-fourth annual commencement exercises of the University of Buffalo, including the Departments of Medicine, Law, Pharmacy and Dentistry, took place at the Teck Theatre. Professor Adelbert Moot, LL. B., delivered the address. 1.00 P. M.—The faculty of the medical department received the graduates, their friends and the alumni at the University Club, where luncheon was served.

CHANCELLOR NORTON.

Professor Moot, in the beginning of his address made announcement that Vice-Chancellor Norton had been created Chancellor that morning, by unanimous vote of the Council. Nothing in the form of an exodium could have pleased the audience more, its gratification being testified in generous applause. Chancellor Norton previously announced that the \$50,000 necessary to secure the Main street site for the Greater University had been subscribed.

CONFERRING OF DEGREES.

Chancellor Norton conferred degrees on one hundred and seven candidates, the graduates being distributed among the four departments as follows: medicine, 34; pharmacy, 28; law, 26, and

dentistry, 19. Those receiving medical degrees were Horace James Beel, Medina, N. Y.; Frank Edwin Brundage, Ph.B., 572 W. Ferry St., Buffalo, N. Y.; Paul Curtis Campbell, 365 Walnut St., Lockport, N. Y.; Anthony J. Cetola, 65 Front Ave., Buffalo, N. Y.; Edward Daniels Clark, 48 W. Oakwood Place, Buffalo, N. Y.; Julius Cohen, 180 Hodge Ave., Buffalo, N. Y.; David Gordon Cooper, Lyndonville, N. Y.; Samuel S. Creighton, 448 Elk St., Buffalo, N. Y.; Charles Denton Cromwell, Peoria, N. Y.; Warren Z. Dell, 99 Harvard Place, Buffalo, N. Y.; Howard Cousins Fairbanks, Hermon, N. Y.; Raymond Cornelius Fess, Bowmansville, N. Y.; Roy Crowder Fisher, 42 Lawrence Place, Buffalo, N. Y.; Gilbert de Leverance Forbes, Kendall, N. Y.; William Francis Gallivan, 125 Walter St., Buffalo, N. Y.; Joseph P. Gimbrone, 247 Front Ave., Buffalo, N. Y.; James V. Gowans, Attica, N. Y.; John Stephen Herlihy, Akron, N. Y.; Charles Gordon Heyd, B. A., 418 Sherbourne St., Toronto, Ont.; Allen Wheeler Holmes, West Falls, N. Y.; Joseph Edward Hurley, 10 Phelps Ave., Rochester, N. Y.; Benjamin Jacobson, 159 Cedar St., Buffalo, N. Y.; Frank Christian Kleckner, 342 Monroe St., Buffalo, N. Y.; Charles George Lenhart, Lockport, N. Y.; Harry Eugene Lyons, 3050 Peach St., Erie, Pa.; George Patrick McCarthy, Friendship, N. Y.; Herman Frank May, 641 Elm St., Buffalo, N. Y.; Rudolf Christian Miller, Ph. G., 596 Broadway, Buffalo, N. Y.; Eugene William Rother, 444 Pearl St., Buffalo, N. Y.; Bernard Francis Schreiner, 121 Ash St., Buffalo, N. Y.; Archibald Wilson Thomson, 22 William St., New York City; Frank Hamilton Towne, Silver Creek, N. Y.; William Joseph Tracy, 301 Canisteo St., Hornell, N. Y.; Frank Gebhard Walz, 159 Howard St., Buffalo, N. Y.

INCIDENTS.

The Medical Department offers no prizes, but first, second and third honors went to Charles Gordon Heyd, A. B. Frank, Gebhard Walz and Rudolf Christian Miller, Ph. G.

Dr. Lucien Howe, according to his usual custom, entertained the medical graduating class of 1909, at the University Club, Wednesday evening, about forty attending the dinner.

Renewing old friendships, swapping reminiscences, and singing college songs, the class of 1899, of the Medical Department at the University of Buffalo, held a banquet to celebrate its 10th anniversary of graduation, in the Lafayette Hotel, Wednesday evening, May 26. Twenty members of the class put in an appearance. The greatest enthusiasm was evinced when mention was made, in one of the speeches, of the near approach of the greater "Queen City" University. Dr. Francis F. O'Gorman was toast-

master. The speakers were Dr. George Staniland, Dr. A. F. Zittle, Dr. Julius F. Riester, Dr. Louis Beyer, Dr. Ira Livermore of Shelby and Dr. Fred Eckerson of Gowanda.

Something more should be said of that brilliant young Chancellor, Mr. Charles P. Norton, who has succeeded in making possible the "Greater" University of Buffalo. He has literally wrung victory from defeat, and we cannot present the case in better form than did the *Evening News* in its editorial of May 29, 1909, from which we quote.

CHANCELLOR NORTON'S SUCCESS.

Charles P. Norton has been Vice-Chancellor of the University of Buffalo during a period devoted to obtaining a site in preparation for a department of arts and letters on the University foundation. Last summer he was given an option of lands at the city line on Main street with a year in which to collect the price and take the property. The deal was made with the county after discussions as exasperating for their stupidity on the part of some opponents of it as they were needlessly prolonged. It was an almost heartbreaking battle to get through the Board of Supervisors but it was won by the side devoted to liberal ideas of education and Mr. Norton at once began another campaign for the funds to make the chance of the University good.

It is announced that Mr. Norton has succeeded in his quest. His persistence and pertinacity, his insensibility to rebuff, his ingenuity of argument and appeal or, to put it the other way, his splendid enthusiasm, his determination to win, his disinterestedness and his business skill made him invincible. He has declined to take no for an answer and never failed to return to the charge until he had gained some success from his assault.

It was with a conviction that he was called to a high and noble task that Mr. Norton undertook the work of raising funds for the University. It was in the very midst of the panic that he had to make his start. His burden was all the harder from the circumstances of industry at the time but nothing could stop him or lessen his activity in the sacred cause, as he looks at it. He has kept the faith and fought a good fight and won a grand victory. A man could not ask a finer monument of his interest in a community than such an addition to the University as he has done so much to establish.

Charles Gordon Heyd, Buffalo, entered the competitive examination in New York for appointment to the Post-Graduate Hospital. There were 31 candidates, representing Harvard, Yale, McGill, Cornell, Ann Arbor, Johns Hopkins, Columbia, Pennsylvania and others. Heyd stood highest and received first appointment.

Dr. Joseph P. Brennan, Buffalo, graduate of class of 1908. Wm. F. Gallivan, Buffalo, class of 1909, entered the competitive examination for appointments in Bellevue Hospital, proper.

There were 22 candidates, representing Cornell, Columbia, Vanderbilt (Nashville, Tenn.), McGill. Brennan passed highest and received senior appointment for two years. Gallivan stood seventh and received appointment for one year.

Hospital appointments were distributed as follows: Horace James Beel, Butterworth Hospital, Grand Rapids, Mich.; Paul Curtis Campbell, Emergency Hospital, Buffalo; Edward Daniels Clark, Buffalo General Hospital; Julius Cohen, Buffalo Hospital of the Sisters of Charity; David Gordon Cooper, Buffalo General Hospital; Samuel S. Creighton, Buffalo General Hospital; Charles D. Cromwell, Buffalo General Hospital; Warren Z. Dell, Erie County Hospital, Buffalo; Howard C. Fairbanks, Emergency Hospital, Buffalo; Raymond C. Fess, German Deaconess Hospital, Buffalo; Gilbert DeL. Forbes, Rochester City Hospital; Wm. F. Gallivan, Bellevue Hospital, New York City; James V. Gowans, Buffalo Hospital of the Sisters of Charity; John S. Herlihy, Buffalo Hospital of the Sisters of Charity; Charles G. Heyd, B. A., New York Post-Graduate Hospital, New York City; Allen W. Holmes, Buffalo General Hospital; Joseph E. Hurley, St. Mary's Hospital, Rochester, N. Y.; Charles G. Ienhart, Erie County Hospital, Buffalo; Harry E. Lyons, St. Vincent's Hospital, Erie, Pa.; George P. McCarthy, Emergency Hospital, Buffalo; Herman F. May, Erie County Hospital, Buffalo; Rudolf C. Miller, Ph. G., Buffalo General Hospital; Eugene W. Rother, Buffalo General Hospital; Bernard F. Schreiner, Buffalo General Hospital; Archibald W. Thomson, Buffalo Hospital of the Sisters of Charity; Frank H. Towne, Buffalo General Hospital; William J. Tracy, Buffalo Hospital of the Sisters of Charity; Frank G. Walz, Buffalo Hospital of the Sisters of Charity. Thirty-four graduates; twenty-nine hospital appointments.

IN a warning against the great summer pest and menace—mosquitoes—the Department of Health of Philadelphia says: "Mosquitoes, as a rule, deposit their eggs in stagnant water, which hatch out with great rapidity in the form of small animals called 'wrigglers,' named from the manner in which they propel themselves through the water, which, in a few days, become full-fledged mosquitoes. A sufficient number of mosquitoes to annoy an entire neighborhood can be developed from a very small quantity of water. A neglected tomato can containing water is sufficient for this purpose; therefore, watch, remove, empty or tightly cover with cheesecloth all barrels, boxes, tin cans, choked roof gutters, sewer traps or any receptacle where water can lie for a period of five days."

At a meeting of the Regents of the University of the State of New York, held at Albany, June 17, 1909, appointments were made as usual as follows:

State Board of Medical Examiners—Dr. William S. Ely, Rochester, whose term expires on July 31, reappointed for a term of three years; new appointees, Dr. William H. Park, New York, and Dr. Willis G. Macdonald, Albany.

AN extensive plan to improve higher education is set forth in the announcement of the Higher Education Association which has filed articles of incorporation at Albany with a capital of \$300,000. The incorporators include President John H. Finley of the College of the City of New York, Edwin E. Slosson, editor of the *Independent*, and George B. Cortelyou, who was at one time principal of preparatory schools in New York.

The purpose of the organisation, as set forth in its articles of incorporation, is "to improve higher education throughout the United States, and in particular the internal and external conditions of the American college, by furnishing an agency and funds whereby a careful study can be made and improvement can be brought about in the institutions of higher learning."

The plans contemplate reorganisation of the financial departments of colleges, with development of an internal cost accounting system.

GOVERNOR HUGHES in the latter days of May, vetoed the C. F. Brown bill, amending generally the public-health law relative to pharmacy. Concerning his action the Governor said:

The present bill provides for a new board of pharmacy, to consist of nine examiners, to be designated by the regents of the state university. While, so far as examinations and licenses are concerned, it might be proper to have the board constituted in this way, the advisability of investing such a board of examiners with the broad powers provided for in the bill is open to serious question.

It is provided, however, that the first examiners are to be designated from the members of the present board, and that in appointing their successors the appointment by the regents shall be made from the names of six candidates to be submitted to the regents by the pharmaceutical association. Thus the powers given by the bill are to be exercised by those designated in this manner by a private organisation. I do not believe in this policy.

To warn people of the dangers of flies, and to show them how to get rid of the pests, the Chicago Health Department has issued a bulletin, in which the pesky nuisances are called all sorts of

bad names. "Flies are the dirtiest and filthiest of vermin," the bulletin says. "They are born in filth, live in filth and carry filth around with them. Millions of death-dealing germs cling to them, only to be scattered upon those whom they touch. Now is the time to build your lines of defence. Prepare to fight them as you would wild beasts seeking your life." A good fly poison, not dangerous to human life, the bulletin adds, is a solution of bichromate of potash, one dram dissolved in two ounces of water, and sweetened with a little sugar. Put some in shallow dishes and place throughout the house. Another is cobalt chloride, one dram dissolved in three ounces of water, placed in shallow dishes as above. To clear rooms in which there are large numbers of flies burn pyrethrum powder or blow black flag into the air of the room. These do not kill the flies; they are merely stunned and fall to the floor. They must then be gathered up and destroyed.

THE United States government will be represented at five important medical conferences in Europe this summer by Medical Director J. C. Wise and Surgeon Frank L. Pleadwell, of the navy, both of whom sailed for Europe from New York on June 19, 1909.

The International Antitubercular Congress at Stockholm, July 8 to 10, will be attended by Medical Director Wise, who afterward will go to Bergen to be present at the International Scientific Congress on Leprosy, August 16 to 19, and then visit Budapest for the meeting of the International Medical Congress, which meets there August 29 to September 4.

Surgeon Pleadwell will go first to Paris for the second international conference for the revision of nomenclature of diseases and causes of death, July 1 to 3, and then to London to be present at the Twelfth International Congress on Alcoholism to be held July 18 to 24. Both of the American representatives will present important papers at some of the meetings.

THE Buffalo day camp for tuberculosis patients was opened June 1, 1909. It is located on Main street immediately north of the Lackawanna railway tracks, and has accommodations for sixty patients. This day camp is an important feature of the systematic warfare which Buffalo is making against consumption.

As a result of an amendment made to the public health law by the last Legislature, physicians will have more work to perform. This provides that when a patient dies the physician must within twenty-four hours deliver to the local registrar a certificate of the death and the probable cause. The amendment transfers the

responsibility from the undertaker to the physician, relieving the undertaker of the necessity of calling on the physician for the necessary data.

Under the new law, in case an inquest is required, the Coroner or the Coroner's physician must fill out the certificate, and if no inquest is required and no physician has been in attendance, the certificate shall be filled out by some reputable persons known to the official issuing the burial permit, and the person thus acting must make an affidavit to the facts set forth in the death certificate. The old law required an undertaker to file the physician's certificate before securing a burial permit. The amendment permits the State Health Department to deal directly with the physicians.

Another change requires that the registration of a birth must be made within thirty-six hours to the local health authorities, the object of this provision being to enable the Health Department to arrest at once any disease that may prove to be serious if not attended to.

A NEW anesthetic which, it is said, will prove a great boon to the medical profession, is reported by the American Consul at Bucharest, Rumania, to have been discovered there by an eminent physician. It is composed of strychnine and storeine, and is said to have practically the same effect as cocaine, except that it can be used in major operations and is not applied locally. The drug is infused into the system by injection and causes the patient to lose all sensation, but does not rob him of consciousness. For operations below the waist, the anesthetic is injected at the base of the spine, and for operations above the waist it is infused into the spine, between the shoulders.

The consul reports to the department that the drug has proved successful in many cases in Rumania, and that its discoverer is on his way to London to have it tested by the medical authorities.

MR. WILLIAM JAY SCHIEFFELIN makes the interesting suggestion, according to *The Tribune*, that a prohibitory duty be placed on imported cocaine, in order to restrict the irregular and improper sale of the drug in this country. He calls attention to the extent to which unscrupulous druggists and physicians are dealing in and employing cocaine, which they obtain by importation from England and Germany. By this means they evade the New York law, which compels the manufacturer and wholesaler to keep a record of the persons to whom they sell the drug. If a prohibitory duty would restrict the abuse of cocaine, much could assuredly be said in its favor, but the complications of our state system, with its various laws suggest certain doubts. Mr. Schieffelin's

efforts to get at the abuse are praiseworthy, and his suggestion of a prohibitory duty deserves consideration.

PERSONAL.

DR. FREDERICK PETERSON, of New York, one of the oldest members of the National Conference of Charities and Correction, which recently held its annual meeting in Buffalo, left June 16, 1909, for a trip through the Orient. He is going to see how the Chinese and the Japanese take care of their insane and feeble-minded.

Dr. Thomas B. Osborne, of Louisville, a vice-president of the conference, will leave shortly for Europe. He will make a study of the charitable institutions of the continent.

DR. WILLIAM G. TAYLOR, of No. 576 Lafayette Avenue, Buffalo, was operated upon for appendicitis at the General Hospital recently. It is believed at this writing that his convalescence is assured.

DR. JOHN H. GRANT, of Buffalo, has removed his residence from 380 Franklin Street, to 432 Delaware Avenue. His offices remain at the Mutual Life Building as heretofore.

DR. CLAYTON M. BROWN, of Buffalo, announces the removal of his office from 475 Franklin Street to 158 North Pearl, near North Street. Hours, 9 to 1. Bell telephone, Tupper 1037; Frontier, 3611.

COLONEL WILLIAM C. GORGAS, sanitary officer at Panama, president of the American Medical Association, received the honorary degree of doctor of laws at the recent annual commencement of Jefferson Medical College, Philadelphia.

DR. ROSWELL PARK, of Buffalo, delivered the principal address at the recent annual commencement of the Army Medical School at Washington.

DR. LEWIS S. MCMURTRY, of Louisville, was created doctor of laws at the May, 1909, commencement of Tulane University, New Orleans. Dr. McMurtry received his baccalaureate degree at Center College, Ky., in 1870, and graduated in medicine from Tulane University in 1873. A year later Center College conferred upon him the degree of master of arts. It must be pleasant

thus to be honored twice by one's Alma Maters, and it certainly is most gratifying to the legion of friends of the recipient in this instance.

DR. GEORGE F. COTT, of Buffalo, has announced the removal of his office from 1248 to 1195 Main Street, corner of Dodge. Dr. Chester C. Cott, also has established offices at the same location. Both telephones. Dr. Cott, Sr., was elected vice chairman of the section on laryngology and otology at the recent meeting of the American Medical Association, held at Atlantic City.

DR. WALTER A. COWELL, of Olean, was recently appointed health officer of that city.

DR. WILLIAM C. KRAUSS, of Buffalo, starts July 5, 1909, on a short trip to Europe, to return home about October first.

DR. JOSEPH P. BRENNAN, an interne at the Buffalo General Hospital, has been appointed house surgeon at Bellevue, New York. Dr. Brennan secured his place through a competitive examination and will assume his new duties January 1, 1910.

SOCIETY MEETINGS.

THE Medical Society of the County of Erie held its regular meeting at the University Club Monday evening, June 21, 1909, at 8 o'clock, under the presidency of Charles A. Wall. Program: Relation of local skin lesion to flat foot, Wm. H. Billings; Nervous sequelae on infectious diseases, J. W. Putnam; Surgical importance of the vestibular apparatus, Clayton Brown; Colon bacillaria, Myrtle L. Massey; Localised tuberculosis, James A. McLeod.

COLLEGE AND HOSPITAL NOTES

THE Harrington Hospital for Children, on Goodrich Street, opposite the Buffalo General Hospital, was opened Thursday afternoon, May 27, 1909. The exercises were under the direction of the trustees of the Buffalo General Hospital. The JOURNAL acknowledges the courteous invitation of the trustees to attend the ceremonies.

LEROY has excellent prospects for a hospital and physicians have suggested purchasing the site and building of LeRoy old

high school on East Main Street. The property is owned by the school district and can be bought for \$10,000. The site is an excellent one and the buildings are well adapted for use as a hospital on account of the large, airy and well lighted rooms. A number of citizens have expressed their willingness to aid in the work.

BOOKS AND AUTHORS.

Elementary Practical Treatise on Diseases of the Larynx and Pharynx by **Dr. E. J. Moure**, Surgeon in charge of the Nose, Ear and Throat Department of the Faculty of Medicine, Bordeaux. Translated and adapted by **J. Malcolm Farquharson**, M.B., F.R.C.R., Edin., Lecturer on Diseases of Nose, Ear and Throat in the School of Medicine of the Royal College, Edinburgh, etc., with 210 illustrations. New York: Rebman Company. 1909.

This author has departed from the usual lines in constructing this work. It is limited in its observations to a field below the nasal cavity, and deals with the pharynx and larynx alone, or strictly speaking, together, for the first time in an elaborate treatise. The book is an enlargement of the author's lectures published in 1890, adding the pathology of the tonsils, soft palate, pharynx, and the lingual tonsil. Bacteriology has developed into a large field since the author's lectures were published, and this fact has assisted largely to make the pathology of the pharynx better understood. Therapeutics, too, occupy an increased attention commensurate with other advances.

A number of inflammatory conditions are set forth that do not find place even in the more recent manuals and treatises, such as erythematous angina, erythema polymorphia, pemphigus, and acute ulcerative lacunar tonsillitis, the latter here being differentiated from ulcerative membranous tonsillitis, with which it is often confounded. The author makes a classification of his own as regards tonsillar abscesses, basing it upon the origin of these suppurative processes and upon their history. He evolves a special plan of treatment based on these observations. He omits a description of the anginae symptomatic of rheumatism, scarlet fever and other exanthemata, which are best treated in works on general medicine.

The second part, devoted to diseases of the larynx, is entirely modern. For example, the author describes Kirstein's direct method of tracheoscopy, and Killian's tracheo-bronchoscopy. Pathology again receives particular consideration. By and large it is a work that has not its superior on these topics. It contains much material of special assistance to the general practitioner, while, at the same time, the specialist cannot afford to go without it. The illustrations are excellent, many of which are works of art. The publishers have made it into a handsome book.

Diseases of the Skin and the Eruptive Fevers. By **Jay Frank Schamberg**, M.D., Professor of Dermatology and Infectious Eruptive Diseases in the Philadelphia Polyclinic and College for Graduates in Medicine. Octavo of 534 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1908. (Cloth, \$3.00 net.)

The author of this admirable volume has succeeded in condensing an astonishing amount of information into a comparatively small compass. The work is essentially clinical and practical. It is divided into two chapters, the first being devoted to diseases of the skin, the descriptions of which include the various dermatoses. The book is strongly recommended to students who, while they may not have time, or inclination to consult the large treatises on skin diseases, nevertheless desire a general and practical knowledge of the subject.

A very important and most useful feature of the work consists of the photographic reproductions. Some of these are exceptionally fine and the student will find them a great help in his researches.

The work differs from others in that the exanthemata are treated in a separate chapter, and have more space allotted to them than is given in any work of equal size relating to dermatology. This is well, considering the many errors from lack of training committed by the average practitioner, and the harm that may follow: for instance, the diagnosis that mistakes smallpox for "Cuban itch," a term employed as a mere convenience. The reviewer once visited a town in which existed two hundred cases of smallpox, which each one of the seven local physicians had diagnosed as that purely fanciful disease, a striking commentary upon the meagre training given in our universities to the important matter of general dermatology. The time is ripe for emphasising the close relation that the diagnosis of the exanthemata has to various dermatoses, which is here admirably done. Recognising the necessity of a thorough understanding of the various failures due to physical symptoms, in order that the facts elicited may be properly interpreted the author has spared no pains in showing their basal and underlying principles.

G. W. W.

Conservative Gynecology and Electro Therapeutics: A Practical Treatise on the Diseases of Women and Their Treatment by Electricity by **G. Betton Massey**, M.D., Attending Surgeon to the American Oncologic Hospital, Philadelphia; Fellow and Ex-President of the American Electro-Therapeutic Association; Member of the American Medical Association, etc. Sixth edition, thoroughly revised. Royal octavo, 462 pages. Illustrated with twelve (12) original, full-page, chromo-lithographic plates and fifteen (15) full-page half-tone plates of photographs taken from nature, and numerous engravings in the text. Bound in extra cloth. F. A. Davis Company, publishers, 1914-16 Cherry street, Philadelphia, Pa. (Price, \$4.00 net.)

From the viewpoint of the electrotherapist it would be difficult to make a better book for the purpose intended by this author.

Moreover, it is acknowledged as a safe guide on electrotherapeutics as applied to gynecology. The author is an industrious student of the subject, and presents it in an attractive form. The illustrations are superb, especially the half-tones of clinical demonstrations. This being the sixth edition, a careful revision has been made, and a new chapter added on the principles of electro-chemical surgery in the removal of new growths, the treatment of tubercular adenitis by zinc-mercury ions, and the use of high-frequency, high potential currents in gynecology. The book is now at its best.

BOOKS RECEIVED.

The Practical Medicine Series. Ten volumes. Issued under the general editorial charge of Gustavus P. Head, M.D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Volume III. Eye, ear, nose and throat. Edited by Casey A. Wood, Albert H. Andrews, Gustavus P. Head. Series 1909. Chicago: The Year Book Publishers. (Price, \$1.25; entire series, \$10.00.)

Saunders's Question Compend. Essentials of Medical Chemistry. By Lawrence Wolff. Seventh edition, revised by A. Ferree Witmer. Philadelphia and London: W. B. Saunders Co. (Price, \$1.00)

American Pocket Dictionary. Edited by W. A. Newman Dorland, Assistant Obstetrician to University Pennsylvania Hospital. Sixth edition. Philadelphia and London: W. B. Saunders Co. (Flexible leather, \$1.25.)

Progressive Medicine. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M.D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Vol. XI. No. 2, June, 1909. Octavo, 317 pages, with 52 illustrations. Per annum, in four paper-bound volumes. Lea & Febiger, Publishers, Philadelphia and New York. (\$6.00 in cloth, \$9.00, net prices.)

Report of the Commissioner of Education for the year ended June 30, 1908. Vol. 2. Washington: Government Printing Office.

Handbook of Diseases of the Rectum. By Louis J. Hirschman, lecturer on rectal surgery, Detroit College of Medicine. Octavo, pp. 374. St. Louis: C. V. Mosby Medical Publishing Co.

Dietetics for Nurses. By Julius Friedenwald, Professor of Gastroenterology in the College of Physicians and Surgeons, Baltimore. And John Ruhrah, Professor of Diseases of Children in the College of Physicians and Surgeons, Baltimore. Second edition. 12mo. pp. 395. Philadelphia and London: W. B. Saunders Co. (Cloth, \$1.50.)

Modern Medicine. Its Theory and Practice. 16 Original Contributions by American and Foreign Authors. Edited by William Osler, M.D., Regius Professor of Medicine in Oxford University, England. Assisted by Thomas McCrea, M.D., Associate Professor of Medicine and Clinical Therapeutics in Johns Hopkins University. In seven octavo volumes, illustrated. Volume VI, Diseases of the Urinary System, of the Ductless Glands, of the Muscles, Diseases of Obscure Causation, Vasomotor and Trophic Disorders, Medical Aspects of Life Insurance. Lea & Febiger, Publishers, Philadelphia and New York, 1909. (Price per volume: cloth, \$6.00; leather, \$7.00; half morocco, \$7.50 net prices.)

Vaccine and Serum Therapy. By Edwin Henry Schorer, Assistant Professor of Parasitology and Hygiene, University of Missouri. Octavo, pp. 131, illustrated. St. Louis: C. V. Mosby Co. (Price, \$200)

Physiological and Medical Observations among the Indians of South-western United States and Northern Mexico. By Alex. Hrdlicka. Washington: Government Printing Office. 1908.

Diet in Health and Disease. By Julius Friedenwald, Professor of Gastroenterology in the College of Physicians and Surgeons, Baltimore, and John Ruhrah, M.D., Professor of Diseases of Children in the College of Physicians and Surgeons, Baltimore. Third edition. Octavo, pp. 765. Philadelphia and London: W. B. Saunders Co. (Price, \$4.00.)

Mylomata of the Uterus. By Howard A. Kelly, Professor of Gynecology in the Johns Hopkins University. And Thomas S. Cullen, Associate Professor of Gynecology, Johns Hopkins University. Octavo, pp. 723. Illustrated. Philadelphia and London: W. B. Saunders Co. (Price, \$7.50.)

International Clinics. A Quarterly of Illustrated Clinical Lectures and especially prepared articles on Treatment, Medicine, Surgery, Neurology, Pediatrics, Obstetrics, Gynecology, Orthopedics, Pathology, Dermatology, Ophthalmology, Otolaryngology, Rhinology, Laryngology, Hygiene and other topics of interest. Edited by W. T. Longcope, M.D., Volume II. Nineteenth series. Philadelphia and London: J. B. Lippincott Co. 1909. (Cloth, \$2.00.)

Treatment of the Diseases of Children. By Charles Gilmore Kerley, Professor of Diseases of Children in the New York Polyclinic Medical School and Hospital. Second edition. Octavo, pp. 629. Philadelphia and London: W. B. Saunders Co. 1909. (Cloth, \$5.00.)

Hydrotherapy. By William H. Dieffenbach, Professor of Hydrotherapy, New York Homeopathic Medical College and Flower Hospital. Octavo, pp. 267. Illustrated. New York: Rebman Co. (Cloth, \$3.00.)

Treves's Operative Surgery. New (3d) Edition. A Manual of Operative Surgery. By Sir Frederick Treves, Bart., G.C.V.O., C.B., LL.D., F.R.C.S., Serjeant-Surgeon to H. M. the King, Surgeon-in-Ordinary to H. R. H. the Prince of Wales, Consulting Surgeon to the London Hospital; and Jonathan Hutchinson, F.R.C.S., Surgeon to the London Hospital. New (3d) Edition, revised and rewritten. In two octavo volumes. Volume I, 775 pages, with 193 engravings and 17 full-page plates. Lea & Febiger, Publishers, Philadelphia and New York, 1909. Half-morocco, \$6.50, net.

MISCELLANY.

THE United States Civil Service Commission announces an examination on July 14, 1909, at the usual places to secure eligibles from which to make certification to fill a vacancy in the position of pathologist (male), \$2,000 per annum, Freedmen's Hospital, Washington, D. C., and vacancies requiring similar qualifications as they may occur in that hospital.

The Commission also announces an examination on July 21, 1909, at the usual places to secure eligibles from which to make certification to fill vacancies as they occur in the position of physician, at \$150 per month, in the Panama Canal Service. Applicants should at once apply either to the United States Civil Service Commission, Washington, D. C., or to the secretary of the local board of examiners for application Form 1312. The medical certificate in Form 1312 must be filled in by a reputable practicing physician other than the applicant. No application will be accepted unless properly executed and filed with the Commission at Washington prior to the hour of closing business on July 10, 1909.

INDEX TO VOL. LXIV.

AUGUST, 1908—JULY, 1909.

	Page		Page
A CADEMY of Sciences at Vienna	510	Bickman: Textbook of operative surgery	284
Achievement, a notable	570	Bonney: Pulmonary tuberculosis	233
Adams: Painting at exhibition in Künstlerhaus at Vienna	623	Brickner: Seven hundred surgical suggestions	640
Adulteration of food	327	Browne-Crichton, Sir James: Parsimony in nutrition	580
American fleet at Auckland	259	Brunton: Therapeutics of the circulation	462
Anesthesia	243	Bryant and Buck: American practice of surgery	459
lumbar, results of in gynecological operations	323	Butler: Textbook of materia medica, pharmacology and therapeutics	636
moral	274	Cabot: Clinical diagnosis and treatment of disorders of the bladder with technic of cystoscopy	640
Anesthetic new, reported by American Consul at Bucharest	682	Camac: Epoch-making contributions to medicine, surgery and allied sciences	634
Anniversary, Roswell Park's	340	Campbell: Textbook of surgical anatomy	59
Antituberculosis problem, public health in relation to	203	Casper and Bonney: Genito-urinary diseases	520
Antivivisection bills, opposition to	622	Chapin: Theory and practice of infant feeding	639
Anusol suppositories in hemorrhoids, etc.	395	Claiborne: Cataract extraction	289
for hemorrhoids	445	Coakley: Manual of diseases of nose and throat	286
Apollinaris	345	Combe: Intestinal autointoxication	459
Arhovin Antigonorrheic efficacy of	395	Cullen: Adenomyoma of the uterus	283
Army Medical Reserve Corps	224	DaCosta: Physical diagnosis	457
Arsacetin, employment of, in syphilis	536	Dana: Textbook of nervous diseases and psychiatry	285
Arthritis gonorrheal, antigenococcic serum in	434	Davis: Consumption	286
Asthma, pyrenol in pertussis and	103	Davis: Obstetric and gynecologic nursing	463
B ACTERIURIA, internal medication in	45	Dearborn: Textbook of physiology	408
Berlin Eye Hospital	510	DeLee: Obstetrics for nurses	460
Blastomycosis in New York State	603	de Schweinitz: Pulsating exophthalmos	289
Blood pressure, high currents upon	600	Dieudonne and Boldman: Bacterial food poisoning	635
Bone, endothelioma of, following injury	480	Dudley: Principles and practice of gynecology	282
Books and Authors:		Findley: Gonorrhea in women	464
Abrams: The blues (splanchnic neurasthenia)	59	Fischer: Diseases of infancy and childhood	350
Adami: Principles of pathology	409	Gant: Constipation and intestinal obstruction	519
Aikens: Primary studies for nurses	636	Goepp: State Board questions and answers	234
Allen: Vaccine therapy and opsonic method of treatment	464		
American Medical Association: New and nonofficial remedies	638		
Ballenger: Diseases of nose, throat and ear	176		
Bandler: Medical gynecology	61		
Bandler: Medical gynecology	117		
Beck: Reference handbook for nurses	288		
Bell: Changing values of English speech	579		
Benedict: Golden rules in dietetics	581		

	Page		Page
Gould: Concerning Lafcadio Hearn	576	Mumford: Surgical memoirs and other essays	405
Gould: Borderland studies	581	Munro: Handbook of suggestive therapeutics, etc.	465
Gould: Righthandedness and lefthandedness	582	Neef: Practical points in anesthesia	465
Gray: Anatomy, descriptive and surgical	403	Nicoladoni: Anatomie und mechanismus der skoliose....	638
Gulick and Ayers: Medical inspection of schools	520	Ogilvy: Orthopedic surgery ...	574
Haab and deSchweinitz I. Atlas and epitome of external diseases of the eye	637	Osler: Modern medicine	116
Haab and deSchweinitz: II. Atlas and epitome of ophthalmoscopy and ophthalmoscopic diagnosis	637	Park: Pathogenic microorganisms	405
Hare: National standard dispensatory	522	Parker: Refraction of the eye..	287
Hare: Progressive medicine....	61, 283, 402, 573	Pattee: Practical dietetics with reference to diet in disease...	635
Head: Practical medicine series	234	Penrose: Diseases of women ..	463
Herbert: Cataract extraction..	466	Phillips: Spectacles and eyeglasses	410
Holland: Textbook of medical chemistry and toxicology....	633	Potts: Nervous and mental diseases	59
Howe: Muscles of the eye	281	Powell: Pocket Medical Formulary	522
Hubbell: Development of ophthalmology in America	118	Ruhrah: Diseases of infants and children	61
Jackson: Handbook of diseases of the skin	288	Schamberg: Diseases of the skin and the eruptive fevers..	686
Jacobs: Campaign against tuberculosis in United States...	465	Schmidt: Pain	287
Jordan: Textbook of general bacteriology	462	Strong: High-frequency currents	407
Keen: Surgery	458	Thorington: Refraction and how to refract	639
Kelly: Gynecology and abdominal surgery	406	Todd: Manual of clinical diagnosis	288
Kerley: Treatment of diseases of children	460	Upson: Insomnia and nerve strain	291
Kerr: Operative midwifery ...	407	von Neusser: Bradycardia and tachycardia	60
Kerr: The baby	461	Warfield: Arteriosclerosis	466
Kolle: Subcutaneous hydrocarbon protheses	291	Watson: Diseases and surgery of genitourinary system	348
Kopetsky: Surgery of the ear.	457	Weber: Means of the prolongation of life	457
Lea & Febiger: The practitioners' visiting list	285	Wile: Blood examination in surgical diagnosis	635
Lexer: General surgery	402	Williams: Natural history of cancer	61, 291
Lindsay & Blakiston: Physician's visiting list	290	Wood & Co.: Medical Record visiting list	349
Longcope: International Clinics, 18th Series, Vol. IV.	289, 408, 573, 461	Woolsey: Applied surgical anatomy	464
McCrea: Modern medicine	404	Ziegler: General pathology	405
Mallory and Wright: Pathological technic	408		
Marshall: Sexual question	176	Transactions:	
Massey: Conservative gynecology and electro therapeutics	686	American Medico-Psychological Association, 1907	521
Mellin's Food Co.: Method of percentage feeding	60	American Otological Society, 1908	523
Miller: Cure of rupture by paraffin injections	287	American Laryngological Association, 1908	523
Moure: Elementary practical treatise on diseases of the larynx and pharynx	685	American Surgical Association, Vol. XXVI, 1908	575
		American Laryngological, Rhinological and Otological Society	582

	Page
Section on Obstetrics and Diseases of Women of the American Medical Association....	575
Sixth annual conference state and territorial health officers with the United States public health and marine hospital service	638
Oregon State Medical Association, 1908	524
Reports:	
Commission of 1908 to investigate condition of blind in State of New York	521
Commissioner of Education of United States	583
Henry Phipps Institute, 1908...	524
Books received: 61, 118, 177, 234, 292, 350, 410, 467, 525, 583, 641,	687
Bowel and stomach disturbances, overlooked causes for	142
Breech Cases, hints on management of	129
Brovalol, a new valeric	331
Brush, Edward N.; anniversary dinner	396
Buffalo Academy of Medicine, activities and interests of	83
General Hospital	448
day, camp for tuberculosis opened	681
Bull and McCosh, honoring	507
Burke: pneumopericardium, report of case	531
CALOX , oxygen tooth powder.53,	344
Caravia, Eugene: Cuguillere's serum in tuberculosis	156
Cardiac, unusual murmurs	106
Cerebral diplegias, prolonged and tedious labors and forceps deliveries as causes of epilepsy, idiocy and	353
Cervix, artificial dilatation of	247
Chappaqua Mountain institute, abolition of	510
Chicago Health Department, pure milk crusade of	450
tuberculosis institute, educational campaign of ...	510
Health Department: Danger of flies	680
Children, care of	91
chronic constipation in ..	102
school, diseases of ..	273, 274
Citizen doctor	477
Clinic, Buffalo Hospital Sisters of Charity	555
Clegg, Moses: Success in cultivating leprosy bacillus	623
Cocaine, prohibitory duty to be placed on imported.....	682

	Page
Collargol enemata in septic affections	155
various uses of	495
to children	496
in joint rheumatism	496
in cystitis	497

College and Hospital Notes:

Buffalo General Hospital	632
Caroline Rest	631
College of Medicine, Syracuse University	58
Columbia University, New York	633
German Hospital, Buffalo, new free dispensary	175
German Hospital, changes in staff	232
German Deaconess's Hospital, changes in staff	232
German Hospital, nurse's home to be built	516
Harrington Hospital for children	684
Homeopathic Hospital, new ..	232
Hospital for Contagious Diseases, resolution	280
Howe Eye Hospital, filed incorporation papers	517
Japanese Hospital at Seoul, Korea	232
Jewish Maternity Hospital, dedication of	517
Kenerson's Dr., cottage, Buffalo, N. Y.	456
LeRoy, prospects for hospital at	684
Medical Department, Western Reserve University	455
McGill University celebrates... ..	518
Neurological Institute, New York	632
New York City Hospital.....	632
Providence Retreat, Buffalo ...	455
Tulane University, Dr. Dock's lectures at	280
University of Buffalo, Medical Department	116, 573
Waldorf-Astoria, first New York Hotel to recognise importance of own hospital.....	517

Correspondence:

Animal experimentation, prevention of abuse in—Van Fleet	338
Food, benzoates—E. E. Smith..	504
Medical research, council on defense of—W. B. Cannon.....	339
New York Association for the Blind	117
Researches concerning compensatory diarrhea—George N. Jack	48
Wistar Institute of anatomy and biology	503

	Page		Page
Cottis: Endothelioma of bone following injury	480	Food and Drug Adulteration: medical and legal significance	132
Cough, whooping, treatment of	95	adulteration of	327
Cremation in Germany in 1908	509	Foster, Frank P.: medical reserve corps	273
Cup, individual paper drinking	623		
Cystitis, treatment of	101		
prevention of	105		
Cystoscopes, originality and priority in modern	1		
		G ONOCOCCIC urethritis, acute	546
D ARLINGTON, THOMAS: Individual paper drinking cup ..	623	Gonorrhea, treatment of acute	121
Deaver, John B.: Banquet in honor of	624	Gonorrheal arthritis treated with antigonococc serum	434
Diagnosis under artificial light	126	Grawitz: Scarlet fever, treatment of	495
of pancreatic affections ..	473	Greater University of Buffalograps	570
Digitalis, infusions of, in heart cases	330	Greef: Berlin eye hospital, director of	510
Doctor on the same plane with a dog, why is	622	Gould, George M.: Exodin	102
Dowd: Prostatic lobes, presentation of specimens	666	From the patient's point of view	469
Drug, adulteration and food, medical and legal significance ..	132	Gynecological disorders, rest an important factor	146
store, imprisonment for substitution in	276	operations, lumbar anesthesia in	323
E BSTEIN: Experiences with medial-Schering	494	H ARDY: Double vagina	556
Eclampsia puerperal, renal decapsulation for	305	Hayd, Charles Gordon: A notable achievement	570
Education, medical, conference on ..	566	Health, influence of smoke on	271
Egg, poisoning by	491	department preparing to enforce antisputting ordinance	570
Ellis, Richard: unusual cardiac murmurs	106	Heart cases, infusions of digitalis in ..	330
Endometritis puerperal, treatment of ..	331	Hemorrhoids	102
Enemata collargol, in septic affections	155	anazol suppositories in	395, 445
Epilepsy, idiocy and cerebral diplegias, prolonged and tedious labors and forceps deliveries compared as causes of	353	Hepatic derangement, treatment of ..	264
Erysipelas, case of	667	Hexamethylenamin (Urotropin) excretion of, in the bile and pancreatic juice	44
Eulenburg: Pyrenol in pertussis and asthma	103	Hichens: Messina earthquake, described by	526
Exfoliativa dermatitis, case of	661	Higher Education Association, announcement of	680
Extrauterine pregnancy, experiences in	237	Hip-joint disease incipient, operation for cure of	594
Exodin	102	Honors to Dr. Henry Reed Hopkins ..	569
		Hospitals, municipal contagious disease	195
		for contagious diseases, need for	450
F ALLIERES'S President, first list of decorations	449	Howe: Dermatitis exfoliativa	661
Febrile affections, urotropin in lumbago of	154	Hughes, Governor: Signing of Senator Davis's bill	625
Fever yellow mosquito, submission to bite of	624	Hughes, Governor: Action of in vetoing C. F. Brown bill	680
Fetterolf, George: symptomatology of tuberculosis of larynx	435	Hygiene, industrial and personal ..	107
Fever, typhoid, new dietetic and injection method of treating	222	Hypertension, nitrites in	606
Filippino physicians	509		
Flies, danger of	680	I DIOCY and cerebral diplegias, prolonged and tedious labors and forceps deliveries as causes of epilepsy	353

"If London were painted green," by a leading eye specialist	450
--	-----

Illustrations:

Burke: Appearance of pancreatic tumor	475
Burke: Pneumopericardium ...	531
Fig. 1, percussion dulness, lying on back	532
Fig. 2, percussion dulness, sitting up	532
Fig. 3, percussion dulness, lying on right side ...	533
Fig. 4, showing area of precordial bulging and tympany	535
Conklin: D'Arsonval Cage....	601
Hardy: Double vagina	557
Howe: Dermatitis Exfoliativa..	662
Fig. 1, dermatitis exfoliativa	662
Fig. 2, dermatitis exfoliativa	663
Fig. 3, dermatitis exfoliativa	664
Fig. 4, dermatitis exfoliativa	665
Lewis, cystoscopes	2
Fig. 1, Brenner	2
Fig. 2, Boisseau du Rocher (1889)	3
Fig. 3, Boisseau du Rocher (1898)	4
Fig. 4, Guterbock (1895) ...	5
Fig. 5, Fenwick	5
Fig. 6, Albarran (1897)	6
Fig. 7, Nitze, evacuation cystoscope (1897)	7
Fig. 8, Koch-Preston-1898 (air)	8
Fig. 9, Schlagintweit catheter cystoscope (1899) ...	9
Fig. 10, Tilden-Brown-1899 ..	11
Fig. 11, Long (1899)	11
Fig. 12, Kollmann-1900	12
Fig. 13, Bransford Lewis Air Cystoscope	13
Fig. 14, Wosidlo-1900	14
Fig. 15, Tilden-Brown-1901 ..	15
Fig. 16, Bransford Lewis universal cystoscope-1906	16
Fig. 17, Nitze-Dittel-1887	17
Mann: Compact ether-freezing microtome	152
Intestinal obstruction	65

Items:

Antikamnia Chemical Co.; construction of new building ...	120
Antikamnia Calendar, 1909	352
Battle & Co., dislocations..	468
Breitenbach Co. M. J.: Physician's daily memorandum....	352

JEANBRAU: Collargol in cystitis	497
---------------------------------------	-----

KEINER: Croupus pneumonia, pyrenol in	103
Kelly, H. A.: Cystitis, prevention of	105
Kissinger, John B.: Submission to bite of yellow fever mosquito....	624

LARYNX, tuberculosis of, symptomatology of	435
Leprosy bacillus, success in cultivating	623
Lewis: Uro-genital tuberculosis ...	643

Literary Notes:

American journal of surgery....	468
English-Chinese lexicon on medical terms, Dr. Cousland.	293
Journal of Pharmacology and Experimental Therapeutics ..	642
Lee & Febiger—announcement.	62
Light therapeutics, Modern Medicine Publishing Co.	641
Philadelphia Academy of Surgery—announcement	119
Philosophy of long life, John Lane Company	641
Saunders, W. B. Co.—descriptive catalogue	468
William Wood & Co.—announcement	293
Lobes, prostatic, presentation of specimens	666
Loveland: Guess-work in the practice of medicine.....	656
Lumbago of febrile affections, urotropin in	154
Lumbar anesthesia, results of in gynecological operations	323

MAXWELL: Adenoids in children baneful	273
McCosh and Bull, Honoring	507
Medical College, one for Louisville	171
Examiners, State Board of	275
Profession, new duty of... ..	314
Society of State of New York, committee appointed	509
course, improved	527
education, conference on ..	566
Medicine preventive, at Panama ..	69
Buffalo Academy of, activities and interests of	83
sociological	179
scientific, education of people in	314
preventive, some essentials of	371
, guess-work in practice of ..	656
Medico-legal	96
Medinal-Schering, experiences with ..	494
Meningitis, therapeutic value of urotropin in	616

	Page
Messina earthquake, description of..	526
Milk cans paper, in use in England	54
pure, crusade of Chicago	
health department	450
Military surgeon, the	505
Miller, D. J. M.: Note on poison-	
ing by egg	491
Mineral nutrients, air, water and	
salts	295

Miscellany:

Army Medical Corps Examina-	
tions	584
Bureau of Public Health and	
Marine Hospital Service.....	351
Medical Interne—Government	
hospital for insane	584
Public health and marine hospi-	
tal service	642
State civil service commission	
examinations	178
Surgeon General of Army—an-	
nouncement by	294
United States civil service com-	
mission examination. 178, 352,	526
United States Civil Service	
Commission	688
Moët & Chandon White Seal Cham-	
pagne	344
Moles, tubal	379
Mosquitoes, warning against.....	679
Municipal contagious disease hos-	
pitals	195
Munson, Edward: The citizen doc-	
tor	477

N ATIONAL volunteer emerg-	
ency service reorganised	53
Navy given its woman nurse corps.	
to have medical reserves	511
Neisser: Arsace'in in treatment of	
syphilis	537
Nephritis scarlatinal, urotropin in..	446
New England: Tercentennial expo-	
sition in Boston in 1920.....	625
New York Post-Graduate Medical	
School and Hospital	109
Nutrients, mineral, air, water and	
salts	295

OBITUARY:

Anderson, Turner	230
Ballou, Edward H.	56
Bartlett, Cornelius H.	401
Barnes, Lewis	55
Bigelow, Alfred J.	452
Brasted, Charles M.	452
Bull, William Tillinghast.....	452
Carlisle, Eber S.	346
Day, Alfred	513

	Page
Edebohls, George Michael	112
Eisbein, David C.	346
Ellinwood, Albert Groves	571
Fowler, Joseph	401
Garvey, James Monroe	452
Gillette, Walter Robarts	278
Green, Robert W.	277
Hall, Orrin I.	55
Harrington, Charles	229
Herschler, Albert Andrew	230
Hyser, William	572
Jayne, Asa W.	277
Miller, Oscar Fitzerland	230
Nicoll, Henry Denton	278
Nisbet, William	512
O'Neill, James M.	55
Pettit, Alonzo	278
Reamy, Thaddeus Asbury	513
Rich, Elton S.	230
Scott, Addison W.	277
Wey, Hamilton D.	512
Wheeler, John I.	346
Wilmot, Allen	570

Obstetric surgery	18
Obstetrics, cervix in. artificial dila-	
tation of	247
surgical idea in	430
Ophtho-mo-tuberculin reaction	559
Ordinance against spitting in pub-	
lic places	625, 626

P ANCREATIC affections, diag-	
nosis of	473
Park, Roswell, anniversary dinner	
On various uses of collargol	495
Patient's point of view, from the...	469
Pedersen: Acute gonococcic urethri-	
tis	546
Pertussis, pyrenol in, and asthma...	103

Personal:

Borzilleri, Charles R.; Dugan,	
John; Walker, J. E.	54
Brush, Edward N.; Benedict,	
A. L.; Bennett, Arthur G.;	
Wilcox, Dewitt G.; Ross,	
Renwick R.	345
Carroll, Jane Wall; Rogers,	
Howard J.; Leo-Wolf, Carl	
G.; Dorr, L. Bradley; Tomp-	
kins, Carl S.; Gallagher,	
James L.	112
Cott, George F.; Colwell, Wal-	
ter A.; Krauss, William C.;	
Brennan, Joseph P.	684
Erdmann, John F.; Gould,	
George M.; Ruf, Frank A. ..	229
Koehler, Frederick W.; Hitzel,	
Gustav A.; Pulver, Arthur	
Le Roy; Cott, George F. ...	511
Krauss, William C.; Lewis, F.	
Park; Wende, Ernest	401
Mathews, Joseph M.	450

	Page		Page
Medical Society of the County of Erie	40, 216, 251, 381, 492	exhibit at Washington	169
Sociological medicine	179	strong fight against	
Spratling: Institutional work for young physicians	565	inroads of	343
State Education Building	618	problem in Buffalo	411
Health Department: Amend- ment in reference to birth and death certificates	681	of larynx, symptom- atology of	435
Stenitz, Ernst: Veronal group, solu- ble hypnotic of	157	fight against	625
Stern, Richard: Urine, influence of urotropin on	153	uro-genital	643
Stocker: case of erysipelas	667	Typhoid, urotropin in convalescence from	103
Stomach and bowel disturbances, overlooked causes for	142	Fever, new dietetic and injection method of treating	222
Surgery, obstetric	18	fever, diet in	361
next twenty-five years in	585		
Surgeon, the military	505	UNIVERSITY day	508
Surgeons, International Congress of	595	of Buffalo 1846-1909	675
Surgical idea in obstetrics	430	of State of New York, appointments made at meeting of	680
Syphilis, employment of arsacetin in treatment of	536	United States Government: repre- sentation of at five medical con- ferences in Europe	681
		Urethritis, acute gonococcic, treat- ment of	546
TACHYCARDIA , treatment of	485	Urine, influence of urotropin on	153
Therapeutic notes	99	retention of and treatment	557
Topics of Public Interest:		Urotropin hexamethylenamin, ex- cretion of pancreatic juice	44
At last, the oxygen bracer	159	in convalescence from typhoid	103
Antituberculosis crusade at the county fairs	105	in scarlatinal nephritis	446
Committee to fight tuberculosis in Buffalo	394	in lumbago of febrile affections	154
Fight against consumption	336	Urotropin, excretion of, in cerebro- spinal fluid	616
Infection, how it affects the body	436	Uterus, retroversions of	421
Medicolegal	266		
Milk, pasteurisation of	165	VACCINATION for smallpox	311
New York Police to stop noises	47	Vagina, double	536
Nutritive and medicinal value of alcohol	561	Valeric, a new, brovalol	331
State Board of Medical Ex- aminers hold court	332	Veronal group, soluble hypnotic of	157
State Charities Aid Associa- tion of New York	500	Veins varicose, surgical treatment of	63
Smoking, chemistry of	497	Vesiculæ seminales, chronic inflam- mation of	28
Unclean and dangerous habit	499		
Vanderbilt tenements	501	WEBSTER, William M.: Why is doctor on same plane with a dog	622
Wiley, H. W., visits Buffalo	335	Weitlaner, Franz: Urotropin in lumbago of febrile affections	154
		Whooping cough, treatment of	95
Tubercle bacilli, staining of	67		
Tuberculosis, International Congress on	51	ZWEIG: Hemorrhoids	102
Milk Exhibit at Inter- national Congress of	110		
Cuguillere's Serum in treatment of	156		

